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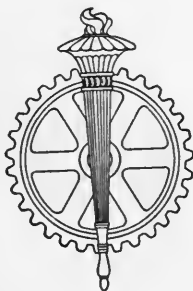
# How to Manage Men

## THE PRINCIPLES OF EMPLOYING LABOR

BY

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## PREFACE

THIS book is offered with the earnest hope that it will help its readers to think, and think clearly, on the whole matter of the relations between workers and their employers. In these after war days it is most interesting to see the struggles through which employers are passing in their efforts to find the one panacea for their troubles. Many can seemingly not think of this as a large, broad problem, affected by the work of almost every department of their organization, but feel that there is some patent medicine that will cure all ills, and which can be administered by a small organization headed by a man who is willing to work for less than the average workman in the plant. It is needless to say that no such panacea exists, and it is to be regretted that there are so many men in high positions to whom it needs to be said again and again. It is also a fact to be viewed with alarm that there are workers who do not see that there is only disaster ahead if their policy of "taking it all" is maintained. It may well be that the fault lies with employers who have not taken their employees into their confidence and have not shown them where the money goes which is taken in exchange for the goods sold. No one really intends to kill the goose which lays the golden egg, but if we do not know her limit it is easy to destroy her usefulness as a producer.

So in arranging the material that presented itself as desirable in a treatment of the "Principles of Employing Labor" it seemed wise to divide it into four general parts or sections. The first, under the title "Establishing the Employment Department," considers the general policy that the management should adopt in its labor relations, and then passes on to the standards for selection and training employment managers, the machinery of employment, and the basic factors whereby

the work of the department can be evaluated. The second part is more particularly devoted to the employment manager and his immediate and personal problems. He is the one who must record and select, must secure and train his own office force, and administer in a broad way the work of his department, keeping in touch with all the other departments of the plant, for he is serving all the others.

The third part deals with those efforts and conditions that tend to satisfy and bring contentment to the workers. The title is "Promoting Industrial Relations," and such matters as the rights and duties of labor, hours of labor, health, sanitation, rest periods, recreation, housing, and financial aids are presented with an attempt to evaluate these activities.

The final section "Industrial Education" is devoted to the great subject of training and education in industry. The beliefs and declarations of the industrial educators for the past ten years were demonstrated during the period of war when it was plainly shown what improvements in production and industrial effectiveness could be brought about among unskilled and semi-skilled workers simply by a brief course of intensive, specialized training. Not only does this last section deal with these matters, but it also takes up the training of foremen and that essential instruction which is one of the bases of all Americanization work.

It has been a difficult task to give the different subjects considered their proper relative value. It is easy to write at length about social service work in the factory, about group insurance, and the like, but these things are not the vital part of the industrial relation, and all the insurance and social work that can be done will not affect the state of a plant that has an attack of labor unrest. These efforts are good in their place, but their place is a small one relative to methods of wage payment and of management of labor in the shop.

It would have been easy to devote many pages to the forms and machinery of the employment office. There are as many sets of forms as there are employment offices, and every employment manager thinks his are the best. But as a matter of fact the forms are of so much less importance than the spirit in which the work is done, so much less important than the

backing which the management gives the various departments dealing with employment matters, that they sink into a low place of importance.

On the other hand, there is the important question, which each company must settle for itself—What is its real attitude toward its employees? Employment management, safety engineering, social service, housing, feeding, all have been used time after time for purposes of deception, to make the employees less conscious of the exploitation to which they were being submitted. It has been very hard for a great number of employers to look on their help in any other way than as so many ignorant people who did not know enough to conduct a business themselves and who were, therefore, a subject for exploitation. They find it difficult to look on the hiring of a man as a purely business contract which cannot result favorably unless both parties are benefited thereby.

Analysis of labor turnover shows in many cases that even where the management desires to meet its employees on a fair basis they are prevented from so doing by the disposition of their foremen. There has never been a time when good foremanship has been more needed than at present, but a man may be a very poor foreman and yet hold his position through lack of adequate means of measuring his efficiency. This lack may not necessarily be the fault of the foreman; it may come through a false standard by which his efficiency has been measured in terms of daily output, rather than output over a long period.

So it has been my intent to evaluate the things which go to make up a satisfactory working organization. It has also been my desire to show that the things which are needful for this purpose are not only inexpensive, but that they are very profitable, for business can only be carried on if there is a reasonable profit to those who assume its risks.

I wish it were possible to give credit by name to the great number of people who have aided in the writing of this book. To do so, however, is impossible for many thousand workmen from many kinds of industry and the officials of firms employing hundreds of thousands of men have generously given me their viewpoints. A part of the matter was presented in

serial form in *Industrial Management* during 1919, and for editorial assistance in the preparation of the present volume, I am deeply indebted to Mr. L. P. Alford and Mr. E. W. Tree.

E. H. FISH.

Worcester, Mass.

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# PRINCIPLES OF EMPLOYING LABOR

## CHAPTER I

### WHY ESTABLISH AN EMPLOYMENT DEPARTMENT?

SCIENCE, engineering, and accounting have all far outstripped in their progress the art of handling men, for with few exceptions this activity of our civilization is carried on exactly as it was in the earliest years of the so-called factory system. It is true that some concerns have given considerable thought and attention to the promoting of personal relations, but for the most part all that one finds is merely the machinery of scientific employment; forms, files, and indexes are unlimited and the vital spark which alone can make such a department profitable is lacking.

As a fundamental basis for all dealings with employees there should exist above all else a good business relation, for good business demands that everything be open and above board. Retail merchants long ago discovered the one-price system and they gave up the idea of taking advantage of the customer's ignorance of values. No such condition prevails in the purchase of labor, however, except where employers, usually against their will, have made a bargain with some labor union for the delivery of so many men at so much per head, which is equally as far behind the progress of the world as the other method.

As we have become more and more an industrial people we have found it necessary to call from the ranks of men whom we previously considered unfit, those who now do rela-

tively fine and accurate work. As we have done this we have taken away from the great rank and file much of the opportunity for advancement, as most workers now know only a minute fraction of the processes of any line of manufacture. It may be said that this is as much the fault of the workers as of employers, in that when they formed their unions they should have made a reasonable knowledge and skill in the trade a part of the entrance requirements. But employers who set themselves up to be big brothers and fathers to their employees cannot gracefully find fault with them for not having greater foresight than they themselves exercised.

But the past has gone and we now face the future, so the placing of the fault is not material. What needs to be done is to build up a working force the world over, so that a larger part of the workers may actually become producers. The part of the proceeds of manufacture which the most profitable businesses pay to the owners is so small, compared with the part that goes to non-producing workers, that it is very much more to the advantage of the business world to so organize its work as to reduce the number of non-producers rather than to quarrel over the relatively small amount which is taken by the manufacturer.

At present we are suffering a great economic loss due to workmen moving around from job to job. Many of these men advance themselves each time they move, but the greater number of these cases represent imaginary opportunities. After a man has moved from one job to another a few times he gets to consider it as a part of life, and then he moves along without any thought or hope of ever settling down. This is all curable, but it is not cured by opening an employment department nor by so-called welfare work, but by establishing a spirit of fair play and mutual helpfulness from the top of the firm down.

The foreman, straw-boss, or whoever comes in most immediate contact with each workman, has the best opportunity to be the adviser of his men. His efforts, however, must be taken up with administrative detail and he has little chance to become really acquainted. It is not always wise for him to be on too intimate terms with them, as some will take advan-



tage of the acquaintance and try to secure favors and advantages. He can, however, be square with his subordinates. Too many are known by their men to be apt to fly off in a rage, and discharge out of hand any one who dares come with a complaint or a suggestion. Autocracy in its most violent form prevails in most shops in the relations of the foremen to those immediately under them, and it exists even in shops whose general managers and superintendents intend to create the very best working conditions possible. They have no way of knowing what is going on, for very few workmen dare speak to the head of the firm. They are overwhelmed individually, and only dare see him in a group.

It therefore becomes the duty of an employee relations organization to establish a contact between the owners, directors, or whatever body has the ultimate responsibility, and the people upon whom they depend for the actual production of the goods which give them their profit. The establishment of a direct line from worker to the highest official is often resented by the men through whose hands complaints, petitions, etc., must travel as they consider that it is treading on their prerogatives and taking away their authority. As a matter of fact, there is no such thing as authority, in its real sense, possible in any shop. There is rule by fear of discharge, which has been a joke for the past few years, but which is just as possible in the future as in the past. Discharge may be direct and actual, or it may be that the foreman will make things so unpleasant for a certain man that he will be glad to hunt up another job. Often this is done so carefully and with such a wealth of experience that not even the man concerned realizes what has happened to him.

Another important part of the work of the employment department should deal with financial relations between the concern and its employees, for after all the wages paid each worker are the most important thing which he gets from the company. But if, as is so often the case, each foreman is allowed to fix the wages, or the rating of his men without supervision he takes on another autocratic power which may be very harmful to the company, both through the chances for petty graft and favoritism, and also by the bad effect

in other departments through the dissemination of information.

When a new man first strikes town he can usually find out which is the best shop in his line of work and also which department in that shop is considered the best. Best, in this case, meaning the same thing as it does to any purchasing agent—where he can get the most for the least. If the employee relations department has the sole function of standardizing wages and ratings between departments so that one is as desirable as another, it will justify its cost in the decreased flow out of one department into others. Many employers deceive themselves into thinking that refusal to allow transfers from one department to another stops the flow. But it does not. Many men who are refused permission to change leave and then later come back, perhaps under a different name, into that other department.

The selection of men and women for their jobs, following them up to find out whether the selections were good or whether the employee is wasting his own and the company's time, is still another function of the employment department that has received a great deal of attention on paper, but which is most commonly found to be carried out very much as it was years before any agitation for scientific selection was even considered. There are certain qualifications which are assumed in every man, but which are not always found. We all want honest workers; we make an effort to find out whether the applicant has ever been in jail for thieving, but we do nothing to find out whether he has habitually stolen time which he has sold to previous employers. We are at fault here, for he may have been reformed in jail, but discharging a man for laziness has no reformatory effect. We are beginning to inquire into a man's physical soundness, timidly to be sure, but with an intent to some day make it a worth-while job; but we make no inquiry into his mental health. The number of men who were taken into the army and navy from really good jobs and who are being discharged as "constitutionally inferior" is a startling reflection on employment methods.

We make no effort to sort out men by temperament or disposition. The phlegmatic are placed where quick action is needed; and nervous, high-strung men are assigned to the

watchmen's force. The only change which has actually taken place is that instead of men being turned down by one foreman and not knowing who else to apply to, they are now candidates for all the jobs that are open.

The transportation of employees to and from work is another problem which should receive the attention of the employment department. The fact that trolley cars or trains run between the plant and the city is apparently accepted by some employers as an evidence of adequate transportation, especially if they find it possible to keep enough names on the payroll to fill the shop. They do not ride on their own trains often enough to find out what are the real conditions. Just why the same fare should be charged for standing room in cars that should have been condemned years ago, and on runs where a snail's pace has to be held to enable an inadequate train crew to collect the fares, as is charged for more fortunate passengers who insist on plenty of room, a seat for everybody and quick passage, is something for the employee relations department to give careful consideration. This should be done not merely to keep down labor turnover, but to bring up the spirits and the physical powers of the men. A man who has ridden for an hour or more hanging on a strap in an ill-ventilated car cannot go to work with a vim and the energy of a man who has had a half mile or a mile walk from his home, or a ride in a comfortable seat in a well-ventilated car.

Feeding men who do not live within an easy walking radius of the plant is still another of the so-called smaller problems of the employment department but one which has an important bearing on the preservation of good business relations. Practically every firm declares its intention of giving its employees food at cost, and most of them do it below actual cost, though, like the problem of training, few are willing to face it squarely and keep a record which includes all the costs which would have to be charged to it if it were run by an outside commercial organization.

But even when food is served at actual cost it has to compete with food brought from home where the cost of the major materials entering into it are all that are taken into account. The workman's wife or mother does the work of

cooking and putting up the meal, the salt, butter and other extras come out of the family store; in fact, very little is purchased for the exclusive purpose of filling a dinner pail. Competition with this method is impossible except as the employer may consider that it is profitable for him to invest some money in the better health for his employees.

All of these matters, just briefly discussed, and in some cases still others, become at times very much the concern of the firm. Its greatest danger is that seeing the necessity of doing something along these lines to make it possible to get and keep an organization, it will do these things in a patronizing paternal way and so offend more than help. Men certainly resent being treated as other than independent. They may not agree to strike in a body, but they go on individual strikes whenever they feel that their individual liberty is being curtailed.

Certain people much concerned about industrial democracy are suggesting that all these matters be given over to representatives of the employees. They point to certain quite successful lunch rooms, and to many successful mutual benefit associations, thus conducted. They overlook the fact, however, that all these activities require the investment of capital which the workmen do not have, or having could not be advised to invest in a firm where their presence is dependent on so many things which they cannot control. Housing, for instance, requires an investment of capital. It is quite desirable for men to own their own homes, but no one can conscientiously advise a workman to buy a home in a "one man" town. All sorts of unjust and unnecessary squabbles come up in such places, and it may become so unpleasant for himself or his family that he would be glad to give away his equity in the house for the sake of moving away. As an ideal to be carried out if ever the time comes when a shop consists of a stable group of people who are owners as well as workers, it is an excellent thing; but during a period of transition which may last for many years it seems to be impossible for one group of people to furnish capital with which another and wholly indeterminate group of people may carry on a business.

This is further complicated by the fact that in the past

workmen have shown poor judgment in selecting their representatives. That is, they have been represented by fighters rather than by business men. No doubt employers are much to blame for this, as they have seldom met an organization of their employees on a business basis at first, but have waited until forced to do so by fighting tactics. On the other hand, whenever the employers have met their employees on common ground the latter have too many times persisted in leaving their interests in the hands of men of the fighting type. It will undoubtedly be a long time before mutual confidence can be expected, and in the meantime the best we can probably do is to entrust to the employment department the task of learning the views of workmen and preserving, so far as may be possible, the rights and privileges of both sides. It can only do this, however, if it is in the confidence of both sides. Its function must be largely judicial, and it must be in a position to condemn boldly and successfully any unfair dealings no matter by whom sanctioned. Furthermore, the duties of the head of the employment department should be as important in the eyes of the board of directors as those of any member of the organization under the general manager. He should be intimately acquainted with the business, its methods, finances, and hoped for developments.

There are few manufactured products in which, if all the steps from the raw material through to finished product be considered, the bill for labor is not the largest item. This labor is for something which cannot be bought when the market is low and sold when it is high. If not used moment by moment it is lost. An individual firm may find it profitable at times to slow down or close, but the community's interest is such that already we frown on such a practice. In other words, we are all gradually recognizing the desirability of keeping the wheels turning and the largest possible production going forward even though the product may not be immediately salable. Does not the control of this largest purchase which we make demand the supervision of men much higher in rank than the foremen and overseers to whom we have formerly and even now so largely entrust it?

## CHAPTER II

### POLICIES OF MANAGEMENT

**I**N the consideration of the employment problems of any concern it is a fundamental statement, and one that cannot be too strongly emphasized, that employment management must emanate first of all from the concern itself. The employment manager can no more accomplish his work without official backing than can the sales manager or the works manager. This does not mean, however, that the employment manager should work with his hands tied but rather that he should work with the knowledge that he will be supported. He may be experimenting, but it must be the company's experiment, and they must stand or fall with him. Any company which attempts employee relations work with the idea of letting some one "try his hand" at it and deciding later whether or not it is what they want will surely fail.

Backing the employment department merely means that the company takes a position toward its employees and then announces that position. The employment department is the executive body which puts these principles into effect. It may be and should be foremost in formulating the ideas and principles for which it stands, but before any principles are announced, or even tentatively put forward, they must become the principles of the company. The methods of administration, the arrangement of the offices, the forms to be used, and the personnel of the department are all matters that the company management will seldom wish to be concerned with, but responsibility for policies properly rests with it.

At the present writing the thought foremost in one's mind in this connection is the democratization of industry, but there are other matters of scarcely less importance such as hours of

labor, methods of paying, housing, transportation, safety, health, and sanitation, and a long list of other industrial relations on all of which it is necessary to have a complete and well-defined understanding of basic principles. Deciding each case on its merits is not conducive to uniform justice, nor is it likely to lead to contentment and satisfaction on the part of the employees.

Above all these, however, there towers the necessity for a uniform and established principle toward the method of severing connections with employees, in other words about "firing help." Whenever it becomes possible to bring labor turnover near the zero point, or even to the small percentage say of 15 or 20 per cent per year, then we shall have to be much more particular about the justice of these forced departures, not that the justice of the case will be any different, but because the difficulty of finding a new job will be so greatly increased. When there is only one-tenth the shifting about of men it will be ten times as hard for a man to find a new job, and a job will then become a prized possession. It will also become as much a crime for an employer to take a job away from a man, without due process of law, as it is for him now to take land, buildings, or money in the same way. This principle is seldom thought of in this light. To-day the privilege of working in a given shop is not marketable, nor would it be so if the privilege were transferrable, but if we succeed in accomplishing one of the most recognized objects for which employment departments are organized, these rights will then have a value, and obviously, having a value will then cease to be something that can be taken away without recompense.

In a lesser degree this is also true of all matters which might be classed under the name of welfare work. Gardens, games, theatricals, dining rooms, houses, and company stores, all these, after a little time, become prerogatives rather than things to be appreciated. They become a part of the wages paid but are seldom taken into account when comparisons are being made. They are therefore dangerous matters with which to experiment unless the firm is fully prepared to go through with them. On the other hand, there is the expecta-

tion of returns from the employees, and this is almost wholly summed up in the one word, production. Production must carry the firm, its welfare work, its employee relations, and a reasonable profit, or else sooner or later the firm will cease to exist. There are workers, and many of them, who fulfill the socialist idea that men will do their tasks well regardless of the amount of their wage. The larger number, however, must have something else besides ideals.

Men now work because of habit or necessity, for the love of money, for the love of what it will buy, or for various other reasons all of which can be classified as positive or negative. A man who works hard through fear of discharge, fear of poverty, or fear of losing caste in his world cannot put forth his best efforts, while on the other hand, the man who works because more money will add to his happiness, or because it is a pleasant duty, can accomplish wonders. The company's policy should, therefore, be based, in a general way, upon whether it will induce men to work for it in this latter and positive way, or whether it will hire the type of brow-beating foremen and superintendents who go on the theory that all men are crooked and will not work unless driven. The latter, of course, attract to themselves the kind of men who are lazy and crooked and who do not mind being watched since they know that they need it.

It is highly important that every shop have a creed, a general statement of principles, subject to change, of course, but always published, and always lived up to, so that when a man says to a foreman, "You must not do that because Article 12 of the Code says that you must do otherwise," the foreman will know that Article 12 will be lived up to, and that he will be held accountable. Such a creed will likewise have a wholesome effect when the foreman can point to a set of rules on the wall and say, "That is what the management says they will back me up in, and I know from experience that they will do it."

When no one, not even the management itself, knows what principles it will stand for to-morrow, there can be neither confidence nor lasting plans between workmen and management. Stability in industry comes from confidence that the



firm has the capital and the credit to establish a policy and to stick to it through thick and thin. The concern does this in its sales and in its manufacturing. It also establishes the belief in the minds of its customers that it will still be in business in the years to come and ready to render service. It erects its buildings with a view to the future, and it establishes its credit with the banks, but in very few instances does it attempt to secure for the future the good-will of its employees. It is the old-fashioned concern that has kept men in its employ twenty or thirty years that can hold its best help, and such concerns have the most strongly established position with their men because they have maintained a uniform policy for so many years.

A concern which wishes to establish itself in a position wherein it will not be troubled by strikes, must do so either by this slow process over a long period of years, or else it must come out plainly and boldly and, with nothing concealed, say to its men, "Here is where we stand; if you come to work for us you come under these conditions and they will not be changed except with your consent." This sounds drastic, and yet would any employer make a deal with just one man on any other basis? Would he agree to sell machinery to a man at a given rate and then expect to change the rate without consulting him? He would not, and he could not if he wished. Nor do we encourage a manufacturer to establish a factory in our town, and after agreeing to purchase a supply of goods, without notice tell him we have changed our minds and that he ought not to have located in our town. Such a case is fairly comparable to the way we do treat our employees. The fact that last week we told one of our men that he was doing the best work in the shop and gave him a raise in pay does not seem to be the least bar to our "firing" him next week. If men realize that their jobs are constantly in jeopardy, and that they must always keep packed ready to move, one need not wonder that they do move, and labor turnover will be high whenever a concern has no established policy upon which men can rely for the continuance of their jobs.

It is not enough, however, that the company should enunciate a policy. It must also put the employment department

in a position to see that its policies are carried out. It cannot say to the men, "You shall not be discharged without a hearing and a careful study of your case," and then have the whole plan upset by a foreman who demands that unless a certain man be "fired" at once he himself will leave. It is accordingly just as necessary that the foremen understand and acquiesce in the principles of the company as it is for the men to agree to abide by them. Such relations should be a whole-hearted agreement, with no reservations. The foreman who cannot maintain discipline without the right to discharge should not remain a foreman. As a matter of fact he can, and probably will, accept these principles without any expectation of saying "I told you so" every time that some minor hitch occurs in their application. It would also seem that if there is a scheme of shop committees there should likewise be another committee of foremen who could present their side of the case, for while they represent the management, yet in a shop of any considerable size they are almost as distant from it as the workmen themselves.

Disagreements are certain to arise for honest differences of opinion are inevitable, but here too there should be a known principle governing the company's method of approach. It should not be left to the foreman to smooth out a threatened rupture of good feeling and then later the case be taken over by some other official. Nor should it be the duty of the employment department to attempt to settle a strike. To be sure the employment department has its judicial functions, but it is necessarily in a rather difficult position, because though dependent on the company for its existence it must keep an "open ear" for anything that savors of a charge against the company and it must also stand for the right no matter how partisan it might care to be.

In the settlement of disputes the employment department can usually furnish information which will be of help to both sides in bringing about an amicable settlement, but there should be some definite official, preferably in the directorate, to whose attention every disagreement which threatens to become serious may be brought. In this case, as in every other similar relation, it is highly important that there be

a definite policy, and even if that policy is a bad one, the fact that it is known to the employees will prevent many men from placing themselves in a position from which they could not make a good retreat. On the whole a policy which provides that all sides of the case will be heard by some one high enough in the organization to command respect is the one which will bring the largest profits.

### CHAPTER III

## SELECTION AND TRAINING OF EMPLOYMENT MANAGERS

**T**HE only type of employment manager who deserves the name is one who has the courage of his convictions, who loves his work more than he does his job, and who is willing, if necessary, to lose his job rather than break faith with the employees whom he has hired for the company. In other words, his is a missionary job.

The works manager and the sales manager have both established themselves as necessities, and no firm ever considers getting along without them. They have also established for themselves certain lines of credit. The works manager gets credit for low cost production; the sales manager for increased sales. To be sure, either one may get unearned credit or suffer from undeserved losses, but they know the standard by which they will be judged and they play the game according to the rules.

There are no rules, however, by which the employment manager is rated. He may reduce labor turnover from 500 per cent to 100 per cent, but if he figures that he saved the hiring and breaking in of 20,000 men, and that each man would have cost \$50 to find and train, and he therefore tells the management that he saved them a million dollars, he is laughed at for his pains. As a matter of fact, he probably saved them a great deal more than that for \$50 is a low figure for most shops. However until there is a standard method of crediting the employment manager with what he accomplishes, he will continue to rank with the minor departments of the office, and be looked upon as a necessary evil the cost of which must be reduced to a minimum.

If a man looks on employment management as a good job and one that he wants to hold indefinitely, he can, by a number of subterfuges, accomplish a great deal without having the real cost charged up to his department. He may, for example, secure separate accounts for safety, hospitals, and educational work, and he can also get a great deal of work done by men whose salaries are charged against other departments. An educational department against which there is charged only the salary of the director and one or two clerks looks like a very inexpensive department, but if the time of the different foremen who act as instructors were charged against the educational department the directors would most likely decide that it would be much cheaper to consolidate all educational work and secure full-time instructors. The same is true of many other of the schemes which are used by employment managers, safety engineers, or educational directors to cover up their expenses and make themselves so inconspicuous that their jobs will not be taken away from them.

Since an employment manager must have the spirit of a missionary, and since there is at present no accepted way of measuring what he accomplishes, it is quite likely that he will not ask for all of the salary that he deserves; consequently salaries are bound to be low. Many men, however, are attracted to this work because the salaries which are paid seem high to them, and it is a problem for the concern to distinguish between the real employment manager and the time server.

There are all kinds of people making good in this work: graduates of colleges and of the school of hard knocks, and men and women of every imaginable type. There are, however, resemblances which are noticeable as soon as one talks with them; resemblances which are visible at their conventions no matter how much they may disagree among themselves, and which revolve around the coming of a day of better understanding between managers and men, rather than any relations between capital and labor. There is also the common desire to act as intermediaries between men and their employers and to get them to see that their interests really lie in the same direction. Get a man with the desire to help straighten out the labor tangle, find out if he has common

sense, see if he has worked with his hands, pay him enough salary, give him an office every bit as good as the works or sales manager, and then give him authority commensurate with the salary and the office and you will have an employment manager. But the man with the most self-sacrificing spirit in the world will fail if he does not have the open and well-advertised backing of the management, and that comes through apparent favor. The management always gives the men on whom it relies money enough to keep up good appearances and offices suited to their position. That is the company's way of advertising its standing to the world and to its other employees.

Perhaps to-day most successful employment managers are so-called educated men, but it does not require much formal education to do the work of the employment manager. There are, however, more capable men acquiring an education now than ever before, and many concerns demand that their employment manager be a graduate of a college or technical school. This assumption presents somewhat of a handicap to the man who aspires to work of this nature, because, without the slightest excuse for it, employers are tending toward making a college or technical school education an essential qualification for this and other jobs which have little need of such training.

If the head of the department is wise he will educate himself in the ways of the shop and office before he starts to work. It is not necessary that he actually work in every department, but if he has not done similar work he ought at least to try it long enough to find out just how much he can do without getting completely tired out. He should also be familiar with all the jobs which his assistants and subordinates are to do, for his own protection if nothing else. As far as training for employment management goes it is unnecessary for a man of intelligence to go to a special school, for there is plenty of printed material to give him the necessary information. Codes for the guidance of the profession have not as yet been established, neither are there professional secrets, and every employment manager is ready to tell his experiences and is eager to hear those of others.

Perhaps some day our engineering schools will establish courses in employment management but they will not be so much courses in employment management as they will be courses in business management and common sense. The principal problem in this profession is to think one's way out of the difficulties which arise from moment to moment. When a foreman threatens to throw up a job he has held for twenty years unless a certain man is "thrown out" of the shop, and all the evidence brought before the employment manager proves that the man was right and the foreman wrong, there is need of some quick thinking on the part of the manager for he must so present the case to the foreman that the latter will realize how unfair he has been. This, of course, cannot always be accomplished, and it is sometimes wonderful how long service makes a superintendent blind to inefficiency and pig-headedness. It is problems such as these which take up the time of employment managers rather than the problems of larger magnitude which are discussed at their conventions.

Industry is based on the need of men for work, and only within the past few months has there been any consideration of the problem which arises when labor can pick and choose its work. It looks now as though this new state of affairs might never revert to the old. Men are finding it possible to maintain high wages, and employers are not going to sacrifice their profits. Many an employer has sworn that he would never advance wages a cent, but he has quickly done so when the way to profitably advance them has been shown to him.

From time to time courses have been offered in employment management. Such courses have included the systems used, the layout of the department, and all the other items of lesser importance, and while a knowledge of these is desirable from the point of view of the employer, they are not a substitute for any very large part of the real job. Any firm which wishes to install an employment department can call in an expert, and for a couple of hundred dollars secure a layout. For a few hundred more they can obtain a full set of necessary forms, but they are still a long way from having an employment department. But when they have secured a man who has the nerve to tell his boss what is wrong with

him and the departments under him, then the firm is in a fair way to have an employment department.

Almost every manufacturing plant has its weak points and the men usually know what they are. Sometimes they cannot tell what the difficulty is in terms that can be understood by the general manager, but the employment manager should understand them and he should be able to translate them for the men higher up. Many of these troubles appear trifling in the eyes of the management, but until the grievance has been removed there will be neither peace nor comfort. How many plants could depend on retaining the same foreman if the workmen were to vote on the question, even though they were limited in voting to the old reliable men, and secret ballots were taken? One of the largest jobs of an employment manager is accordingly to discover the hidden practices of the foremen. An employment manager should not be hostile to the foremen, but ought to know which foremen should be replaced.

The ability to handle such problems is not acquired in a school, for the employment manager graduated from the best school imaginable possesses only the skeleton of his profession; the rest he must obtain by experience. He can be sure of one thing, however, and that is that all the information he can obtain will be of value to him. He needs to be the best informed man in the place, not only about his own company methods and processes, but about those of other industries as well. He needs to know what a man means when he applies for a job and says that he has had five years' experience at "pulling over" or at "vamping." He needs to know the ways of the firms which are competing for help, so that if a man comes and claims that he was short changed at Brown's shop he will know whether such was really the case or whether some money was taken out of his pay envelope to cover his mutual benefit dues. He needs also to know that one of his own foremen may be a most excellent man when supplied with Polish workers but worthless if supplied with Italians. Knowledge of matters such as these results from observation and cannot be taught in any school. This is probably the reason why men of such diverse training have made good in



these positions. Any training in fact which sharpens the powers of observation, which brings a man into contact with his fellow men, and which teaches him to find out what they think, is good training; the rest is merely a matter of development on the job.

If the firm is in a state of development, and does not know whether they want an employment department or not, and furthermore does not want to spend much money experimenting with one, then they will be very likely to do one of two things, either promote some clerk in the pay roll department to the job, or else secure the graduate of some school who has a diploma certifying to the completion of a course in employment management. In either instance they may develop, and ultimately have a full-fledged employment department. The chances, however, are rather against them; for such cases seem to be another one of those instances in which the Topsy who was not born but "just grewed" is not likely to be received into the family organization on an even footing with the departments which have held high favor with the management in the past. In order that the employment manager possess the standing which is a prerequisite for success, it is therefore necessary that the position be filled by some one from outside the organization, or else by some one from inside who is already known to stand high in the estimation and favor of the general manager. The graduate must, unless he has had previous experience in some line which makes him eligible for a large job, content himself with a position as an interviewer, a follow-up man, or some subordinate job until he makes a reputation for himself. It is also very unlikely that he can hope to jump into a position which pays any considerable salary and which leads in any direct way to responsibility for the work.

## CHAPTER IV

### THE MACHINERY OF EMPLOYMENT

USUALLY the management considers that it has done its full duty when it has provided the employment department with an office fully equipped in keeping with the position which it feels that the department should have. As a matter of fact, this is only providing machinery, and while such machinery is absolutely essential to the conduct of the business of employment, yet, with nothing back of it, it is a poor investment. As has been said before, an employment department is only effective when it becomes the authoritative mouthpiece of the management, and the machinery of the department cannot become such. If the management is not visibly back of the department the department ceases to be of value, and all its machinery is worthless.

The employment department naturally cannot function without a place in which to meet candidates for jobs. The place may be in the works, it may be down-town, or it may even be a room in some distant hotel, but wherever it is the firm cannot afford to have it reflect other than the prosperity of the company. Figure 1 shows an excellent type of room; it is clean, and well lighted and ventilated, but the benches are not so inviting as to make the room a loafing place. Too often men applying for jobs get the idea that the company is niggardly from their first contact with the waiting room of the employment department. Managers questioned as to the reason for the dark, dirty, and unattractive waiting rooms excuse them by saying that the kind of men who apply are not worthy of any better quarters, or that it is impossible for them to be kept clean on account of the filthiness of the men who congregate in them. These statements, however, simply

reflect the opinion of the observer. It is true that many men are seeking work in our shops and factories who are not pleasant to look at, but they are Americans in the making, and we cannot afford to overlook the fact that we have a chance here to speed up the making.

Cleanliness is, of course, not obtainable without action. Because a place was clean last week is no reason for expecting it to be clean next week, unless something is done to make it



FIGURE 1. WAITING ROOM OF THE EMPLOYMENT DEPARTMENT AT THE LYNN WORKS OF THE GENERAL ELECTRIC COMPANY.

so. If the waiting room is built for easy cleaning, as all rooms ought to be, and is always clean when a new crowd enters it, a surprisingly small amount of attention will be required. In one well-known waiting room where from 30,000 to 40,000 men gathered in a year the greatest amount of cleaning was made necessary by a dozen office people who gathered there at noon to play cards. So, first of all, the employment department needs a waiting room large enough to accommodate the applicants with seats during ordinary days and to shelter peak loads with men standing not uncomfortably near together. Experience indicates this area to be in the vicinity of 10 square

feet per man employed each week. That is, a concern hiring 120 men per week would require a waiting room of 1200 square feet, or about 30 feet by 40 feet. If this is made with a concrete floor, with a very slight pitch toward a drain, and the base board is also of concrete and carried up high enough so that the room can be easily and safely flushed and mopped out, there will be no trouble about cleanliness.

The greatest peak load in the waiting room usually occurs on Monday and Tuesday mornings before ten o'clock. The type of man available at these times is especially poor and consequently it is difficult to have a great deal of compassion for the majority of them. It is seldom that a really capable man comes in early on either day. After ten o'clock, however, the desirable men come in by ones and twos, and they continue to come the rest of the day and week. These men need prompt attention and comfortable quarters while they are waiting for an interview because they are more sensitive and high-strung than the Monday morning crowd. They are also more independent. It is an excellent idea to have a fair-sized waiting room beyond the main waiting room into which the more likely appearing men can be admitted.

Most of the Monday and Tuesday morning applicants can be dismissed without consideration, although it is probably wise to take a brief record of each man, if for no other purpose than to have statistics available as to the flow of labor toward the shop. For this purpose all that is needed is a simple form giving the applicant's name, address, last shop worked in, kind of work done, wages expected, and, possibly, age. Statistics concerning the last shop in which the applicant worked are also desirable as they indicate the state of employment in that shop. For example, if a given week shows a great increase in the number of applicants who have formerly worked in a neighboring plant it may mean that the neighboring plant has not kept wages up to the market, or that there is an unpopular foreman, or that some new rule is disliked or an old one is being enforced. At all events it indicates a possible supply of men which can well be sought out. It is surprising how many times a foreman in another shop will often unwittingly help to secure an excellent supply of labor.

At the same time that there is a flow of help into the waiting room there should be a flow of requisitions from the foremen or superintendents so that, as far as possible, the right man will be given the right job. Theoretically, there should be a written requisition for each man wanted and it should be in the hands of the employment manager a considerable length of time before the man is needed in the shop. As a matter of fact, however, it is common practice to find that the requisition, if made out by the foreman at all, is made out after he has the man at work, and this is known as "co-operation" on the part of the employment department. Such procedure is unfair to the employment department. It comes about through men leaving without notice, or the foreman not discovering that men have left until a week or two after it has happened. Then he is ready to overlook all formalities and cut all red tape to get a man quickly so that when the superintendent comes around he will not find an idle machine. Consequently, he will take any one and with very little inquiry as to his ability. The machine runs, the department looks busy, and everything is all right, except production. Moreover, the shops whose superintendents think they have the hardest working forces usually have a great deal of this kind of work because they have the most men leaving the job without notice. This can only be cured if the employment department has the management sufficiently back of it to insist on time to find the right man for the job, and this insistence will save a great deal of the rapid turnover which to-day is so prevalent.

It is almost always found that the men who stay only a few days are the men who were hired hastily, and who were not acquainted in detail with what was expected of them: It is all right for a foreman to say that he only hires the men who are willing to do anything, but after they have spoiled an expensive job they find some way to cover it up and leaving by the back door they never come back, not even for their pay. Willingness to do anything for a given number of dollars and ability to do it should not be confused.

Written requisitions should be insisted upon, so far as possible, and the employment department should only treat

as emergency cases those which are emergencies and not improvidence. If unconfirmed telephone messages are accepted the condition will surely arise when foremen will explain high labor-turnover in their departments on the ground that the employment department sent them there, which is awkward for that department unless they are able to show the requisitions on which they were sent. The question of whether the requisitions should originally come from the straw boss, immediately over the men, the foreman, the superintendent, or the works manager is one which depends on the responsibility which is placed on these men. Generally speaking, it is hardly fair to place responsibility on a foreman without giving him control over his department. If the straw boss is simply a mouthpiece for the foreman, he should not be allowed to make his own requisitions for unlimited numbers of men. If it is the foreman who is held responsible, he should be the man to make the requisition, and it should not be subject to approval by any one higher up, unless that person does actually keep track of all the requisitions which go through his hands.

When the works manager has the requisitions go through his hands purely as a matter of form it only slows down the work without doing anybody any good. He may imagine that others think he inspects them, but he fools only himself. So far as the number of workers is concerned, the works manager should have a comparative statement, week by week, or month by month, showing the number in each department and also, wherever possible, figures showing the production in the same departments. If such information is put in graphical form it is much more easily read than if tabulated.

The requisitions should be as explicit as possible. They should not merely call for a man for a given department, but they should state specifically what he is expected to do. This is not for the purpose of obstructing transfers, but to give the employment department a fair chance to select a suitable man. The large number of wounded soldiers now being trained and placed in shops has brought our attention more strongly than ever to a realization of the fact that most men have limitations and that willingness to "do anything" does not guarantee abil-

ity. It is usually inadvisable to establish wage limits, as the foreman who puts on a wage limit might take it off if he saw the applicants. But, whether wage limits are specified or not, if each man is supposed to be hired on his ability and experience it is absurd to set one in advance of seeing the man. In some cases what is really meant is descriptive in its nature rather than limiting. When a foreman calls for a fourteen dollar a week girl for his office he may mean the kind of a girl that will usually work for fourteen dollars. He may be very much pleased to take on a sixteen dollar a week girl when he sees her.

The requisitions and the applicants should meet each other at the door of the interviewing room. The undesirable should be weeded at the door, only a mere record as previously suggested being taken, and remainder of the men admitted to the interviewing room. These, for the most part, will be available for employment. The interview is perhaps the most important work which the employment department is called upon to do. It is not always done with that thought, however, but possibly more often with the idea that such a task consists in getting some sort of answers to a set of questions. Done in this spirit it is no better than the old way of hiring men on their looks.

It would be better if the interviewer who makes the decision did not fill out any blanks but simply talked with the candidates, and another man, who might be little more than a clerk, secured the written data. The principal objection to the latter system, however, is that the original interviewer, the man who decides, does not have anything to remind him of the points which he should consider before making his decision. He is liable, therefore, to give a very short interview to a man if some one point about him is especially favorable. He thus loses the chance to touch on the candidate's weak points, knowledge of which is exceedingly important. Possibly this can be overcome if the interviewer makes a report giving his impressions as to activity, loyalty, willingness to work, etc., and leaves only those items which are positive facts to be entered by the clerk. It is more the custom, however, to divide the job differently, and have a preliminary interviewer,

who sorts out the unemployable and then routes the likely men to different interviewers through their clerks. If the final interviewers are men skilled in the trades for which they are interviewing this makes a very good system, its worst feature being that it is a system and not a human way of making a selection.

It is very difficult to organize the employment of any considerable number of men in such a way that much of the human element is left in it, and yet that is the fundamental reason for having an employment department. The passing of a candidate from one interviewer to another and the filling out of a multiplicity of forms do not impress him favorably. The less the candidate has to do himself the more of his friends he will advise to come around and apply for jobs. The exception to this is found in the more moderately paid office help who appear to be impressed with the size and intricacy of the application blank which they are asked to fill out. In the shop, however, it is better for the applicant to see as little as possible of the machinery of the department.

How much of purely personal detail it is wise to ask for is a question, for beyond a certain point almost any man will either drop the matter in disgust or else lie about it, and in either case the employment manager fails in his purpose. This point is much further advanced now than it was even a few years ago. The draft questionnaires, the income tax returns, and the minute care which was taken all through the war to discover possible disloyalty have all helped to make us less careful of our secrets, and possibly also to have fewer of them. At all events, no man of to-day goes into the employment office of a concern of over five hundred men without expecting to answer a long and rather searching list of questions. Some of these questions are impertinent to the contract about to be made, for after all hiring a man is making a contract, to be sure a contract easily broken by either side and too often lightly entered into, but a contract nevertheless.

It is the object of the contract to secure for one party the services of an individual who will perform a certain work, the exact nature of which, however, is usually unknown to both parties, and for the other party to sell certain very indefinite



services for the largest possible price and under the most advantageous terms. A contract thus made under such loose conditions is necessarily dangerous to both parties, and should only be entered into by men of the most rigid honor. As a matter of fact it is entered into by all kinds of men on both sides and also very carelessly in most instances. This is one of the reasons for the large labor turnover which is so prevalent. "The green field just over the fence," in some other shop looks so very good to the man working in our shop that he cannot be convinced that he is wrong in leaving except by trying it. When he tries, he finds there are just about the same number of things which are disagreeable about the new job that there were about the old one, and so he becomes a sadder but not necessarily a much wiser man.

After he has jumped about from shop to shop for ten or fifteen years it begins to dawn upon him that all shops are about alike. Employers cut their eye teeth earlier in the game and so they soon give up hoping for an organization that will always be loyal. Such a state of affairs will probably remain about as it is until proprietors discover how little they know about the work being done by their men. Then it may be possible to place employment on a more stable plane, and the contract may be a definite one with which both parties are acquainted.

In no case, however, does this contract become a matter of religion, membership in secret or other societies, the man's state of divorce or marriage, or his debts. If these questions are asked it is either for the sake of asking questions, or for the sake of finding out something which is not pertinent to the contract. It may be that they are asked in order to determine, in the mind of the interviewer, the status of the man's character, which is all very well if the position is one of trust and responsibility, but character is something so often a matter of environment that it seems hardly possible that a man can have other than a good character if he is in the right surroundings. It is much more to the point to be able to say to the applicant that the shop is fit for a man to work in than it is to know whether he attends church and whether that church is the one favored by the works manager. It

will also be likely to have more effect on his character to be in surroundings where the Golden Rule is practiced six days in the week than to go to church for an hour or so on Sunday.

Inquiry into one's membership in secret societies or labor unions comes in the same category. If the shop is distinctly and without question a closed shop, either for or against labor unions, that fact should be well known to the applicant, and if it is a closed shop, in the ordinary sense of the word, every applicant should show his union card before he is admitted to the interviewing room. If the shop does not hire members of unions the fact should be plainly stated in a sign over the entrance. Since the great majority of shops are ostensibly "open shops," that is they hire men and not memberships, they can hardly look into membership without exciting the suspicion that they have an ulterior motive. Of course every open shop is an object of suspicion to the unions, whether justly or not, and an inquiry only excites further suspicion and without giving a very clear idea of the actual conditions.

It might also be said that purely from an employment standpoint it is no part of the company's business to inquire how many children an applicant has, for so far there has been no sliding scale of wages based upon the number of his dependents. Whether there should be is another question and one that seems to be a community rather than a company matter. There is no special reason why a man with six children should produce more than a man with three. In fact, he may be so harassed with their sleeplessness at night and the cost of feeding and clothing them that he will be very much less valuable than if he were single. The reason an inquiry is almost always made into the size of a man's family is because of the theory that the larger his family the longer and closer he will stick to the job. This is once more an expression of intention to take advantage of the under-dog's necessities. To be sure men with large families do stay longer on the job than single men, but on the other hand, it is doubtful whether it is wise to have men in the shop who would work elsewhere if they dared to make the break. Intimidation never made profits for any shop, and the fear of discharge which is held over men as a whip cuts especially heavily on the married men.

Inquiry into ownership of property is a similar matter. The fact that a man owns a home is looked upon by many employers as just one more indication that there is a man who can be exploited before he will leave the shop. If, however, the interest of the concern was in the number of American-born children who will be coming along later as prospective workmen, or if their interest in his home was in having workmen near the shop, then these inquiries would be justified, otherwise they become of interest only as statistics and are hardly worth the suspicion which they arouse in the men. They are however the most common questions asked, even though there seems to be little or no use made of the answers, unless it be the rather questionable uses just suggested.

The interviewer himself soon becomes a part of the machinery of the department and to avoid having him perform his duties in a purely mechanical way it is necessary that he be a man with a real interest in the work he is doing. This makes it necessary that he be thoroughly posted on all of the company's affairs for he cannot do his best work if he is blindfolded. Too many managers believe that the affairs of the company should be kept from their assistants, and yet they complain that their assistants do not take the interest in their work that they should. How can a man take an interest in the selection of employees unless he knows whether they are going to be needed permanently, or whether the demand is made because of a temporary spurt in business? If he is just another "hired man" there is little incentive for him to do other than put in his time and be around convenient to the paymaster once a week. He is a part of the concern, or else he is merely a dummy. He should know of the big orders as soon as they are received, if not as soon as they are expected. He should know of the falling off of inquiries so that he may not overhire, even though foremen may requisition men. He should know of changes in pay and the reason for it. In fact, he should know all the company's business as quickly as it is proper for it to be known outside the general manager's office. In almost all shops, however, he is dependent on the "shop wireless" which works faster on good news than bad and which is not always entirely reliable.

The interviewer should be a man old enough to command the respect of every applicant, but he should not be so old that he is unappreciative of new ideas. He should be alert and constantly on the watch to find better ways of carrying on the work of the office. He ought to know enough about every job in the shop so that he does not have to depend on any job analysis, or rather he should have the job analysis of every part of the work so clearly fixed in his mind that, if necessary, he could dictate an analysis to a stenographer. There are some men who can do this without having worked in the shop, but there are very few whose powers of observation are equal to such a task, unless they have at some time done similar work as a means of livelihood.

There is a vast difference between doing work for the sake of the money which comes from it and doing it for the sake of knowing how it is done. It has been observed that very few serious labor troubles occurred during the generation of employers who came up through the ranks and formerly worked with their men. Whether this is literally true or not, the idea is fundamentally good. If the employment department is to represent the management to the men it will profit much by having this actual working contact in its past history.

A very young man, no matter how bright and capable, is not suited to this work for the simple reason that he cannot look the part. It is in many ways a judicial part, and is so considered by the employees. They resent being told things by a young chap which they would take perfectly well from an older man. It is not the fault of the young men that they are not suited to this work, but rather their misfortune. This, however, only applies to the men who actually decide. The clerical work can be done by young fellows or by girls. Such work is excellent training for young men who will some day be employment managers, and such jobs ought not, therefore, to be filled entirely by women.

Employment of women as interviewers or even as employment managers is by no means unheard of, and women have made some very good records, especially in places where a considerable number of girls were employed. They are, however, under a severe handicap owing to the natural reluctance

of a man to ask of them what may seem like a favor, and also of the preference which women have for dealing with men.

Under stress of necessity, both sexes will apply for jobs where they have to state their case to a woman, but it is not by choice, and the shop which employs them for such work does not get the best labor which is available. There is no doubt but that women are quite as capable as men of making good selections from among those who apply, but their handicap is in the applicants themselves. It is such an important matter in many places to get the highest quality of labor which can be found that this phase of the matter should be fully considered before hiring is put in the hands of women. To be sure women have done many things successfully which may seem to parallel employment work, but if such work be analyzed it will be found that it involved positions in which women could "play up" their sex and arouse feelings from which business is supposedly free. Women in employment work cannot gain anything from the sex appeal.

There is a great difference in interviewers as to their methods of meeting men. One will be all smiles and very affable and he is apt to be rated as a sissy among applicants. Another will be gruff and growl at every one, on the ground that unless they are impressed with his importance they will not start to work in the right spirit of obedience. He is shunned by the better class of men, unless they are very badly in need of work. Another will ask very few questions but will size a man up almost entirely on his appearance, possibly by a system of his own, or by some one of the physiological tests that have been made much of in the past few years. He is unsatisfactory to the applicant as the latter usually wants to tell his story to some one who will sympathize with him.

The most successful interviewers are good listeners. It is not altogether pleasant to sit and hear a man ramble through his past experiences, but if he has a weakness it will come out for no system of questioning will bring out so much as a sympathetic and apparently willing listener. Of course there are men who prove exceptions to this rule, but they are few in number, and almost all of them are bashful rather than reticent.

## CHAPTER V

### HIRING THE WORKMAN

HAVING once brought the requisition for help and the man to fill the requisition together, there still remains the task of actually accepting him and taking his record. An occasional employment manager will say that as long as he is employment manager he is going to hire the help without interference from any one else. This is a mistake, for no matter how capable he may be there is the psychological condition to be met which comes about because the man will work under a foreman, and until the man is satisfied with the foreman and the foreman with him the contract is of no value. The employment department is really the agent of the foreman in securing help. It may not appear that way on the organization chart but that is the effect which it has. If, as agent of the foreman, the employment department hires men and sends them to work there will be much more danger of a critical attitude than as if the foreman and workmen had met. To be sure, there will come a time when the foreman will say to the employment department, "Send along your men and don't bother me; you can pick them as good as I can," and when that time comes the employment department has come a long ways toward functioning as it should. It will not profit it, however, to force the issue.

How is the man to meet the foreman? Sometimes a number of men can be held in the waiting room and the foreman can come in but it is usually better for the man to see the foreman on the job. It is expensive to furnish guides, but it is the only safe way. It is not always done, however, and even during the war it was not an uncommon sight to see men wandering around in munition plants and shipyards try-

ing to find a certain foreman with the very uncertain directions given them at the employment office. The opportunities for harm thus afforded were unlimited. Even in peace times there are very few shops so arranged that a man can be safely directed to a given foreman. It is much better to hire a boy to do this work, but it is not a good job for the boy unless he is of the kind that learns readily by observation as he is very apt to loaf two-thirds of the time.

If the man is accepted by the foreman he should endorse his approval on the original requisition sheet. This is for the protection of the employment department, and it adds one more reason for a separate requisition for each man. In fact, the general requisition written for ten, twenty, or a hundred men does not lend itself to the easy working out of a system of keeping track of labor. Each man is a unit by himself; he is not like any other man even though he goes by the same title and draws the same pay. He must be given a separate number and a separate place on the payroll and the best place to begin to make him a separate unit is on the requisition before he is hired.

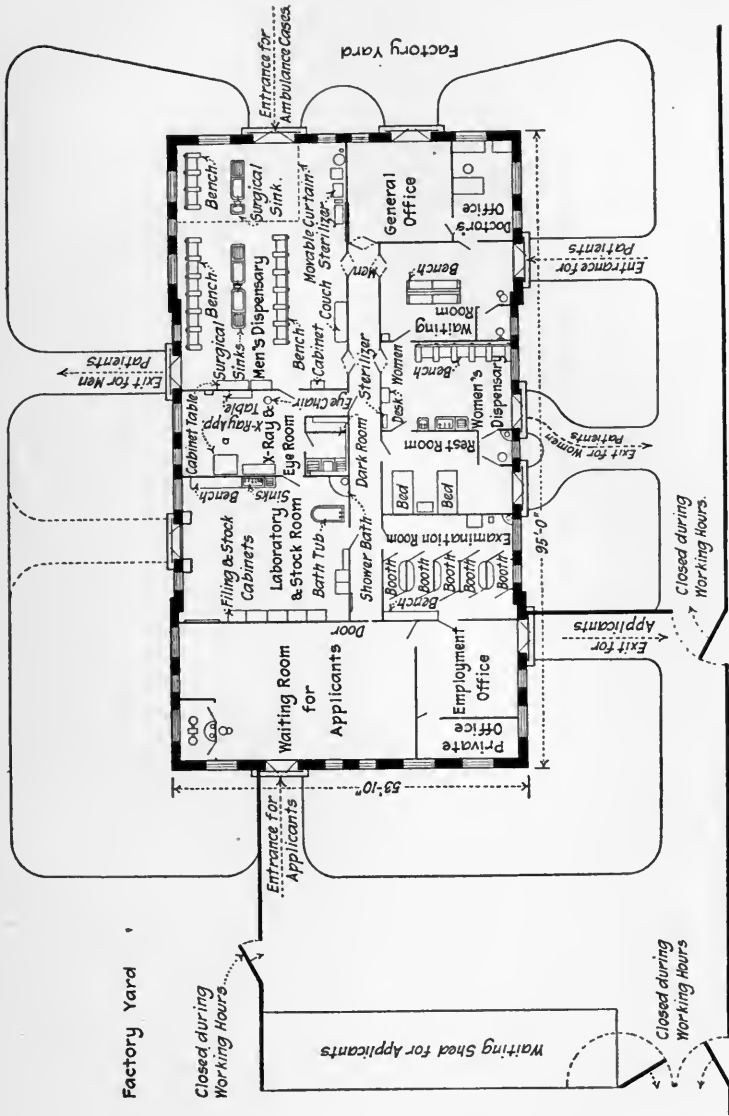
Whether a man should be introduced to the time keeper, and have the location of the time clock, the locker room, and the wash rooms pointed out at the time he meets the foreman is a question to be decided chiefly by the probability of the man's actually coming to work. Where shops of a similar nature are closely crowded together it is customary for a man to take a half a day off and "go shopping around" for a job, promising at each shop to go to work the following week. Thus, if there are four shops, there is one chance in four that he will accept a particular job, and under such conditions it probably is better to spend as little time on him as possible. In such a case, however, it is sometimes an advantage to insist on his coming prepared to go to work, and if this is expected the word will soon spread that only such men need apply as are willing to take the job. This has another good effect in that it decreases the number of men who go back to their present employer and secure an unearned raise in pay on the ground that they are going to leave to take a job with some rival.

Somewhere during this period a medical examination should be given. If such an examination is used to eliminate undesirables it should come after the preliminary interview, but if it is intended to help the employment department place the desirable men where, from a physical standpoint, they will be best fitted, then it should not come until after the final interview, for at that time the medical department can have all the information as to the man's expected place in the organization. On the other hand, if the medical examination is merely one to seek out men with contagious diseases and disqualifying disabilities, as seems to be the case in some shops, it does not make any difference where it comes as it is about equally out of place everywhere.

The physical examination room is not, strictly speaking, a part of the employment department, but is rather a branch of the medical department which is preferably contiguous to the interviewer's rooms. Nearness is of great importance, and delays occasioned by waiting for the doctor are very bad, for when a man is waiting he imagines himself suffering from all kinds of diseases. To be sure, a large proportion of our population is accustomed to physical examinations and knows what its physical condition is, but there are large numbers of others who ought to know their condition who do not, and who are apt to grow nervous through delay. We may, therefore, say that it is essential that the medical department have its facilities for examination near at hand and ready for instant service. Figure 2 shows how this is accomplished at the Lynn Works of the General Electric Company. There should also be every attention paid to reducing the length of time between the applicant's coming into the outer waiting room and his getting the job, or knowing that he does not get one, because from his point of view all that time is lost. He much prefers the old way of hailing the foreman through the shop windows and being hired right then and there, and the nearer we can approach that as an ideal the better.

Some mention should also be made of the plan of having physical examinations made only after the workman has been on the job a week or two. It has the merit of financial economy, if that is a merit, but it does not help the employment





Street

FIGURE 2. PLAN OF DISPENSARY AND EMPLOYMENT DEPARTMENT OFFICES AT THE LYNN WORKS OF THE GENERAL ELECTRIC COMPANY.

department in its selection, and it does not prevent men with contagious diseases from getting into the shop. It is quite like locking the barn door after the horse is stolen. There are many so-called "practical" employment managers who claim to be able to tell by looking at a man whether or not he is physically able to do any given job. They point to individual failures of doctors to notice certain ailments which develop after the men are safely in the shop, and yet this type of manager almost always has faith enough in doctors to call one in if sickness, or even the appearance of sickness, visits his home. There is no doubt but that in many cases the doctor would, if he were hiring men for himself, take a chance on the man's appearance and hire him without any examination, but knowing as he does that there will inevitably be knockers in the shop he cannot take the same chances in another man's shop.

Every effort should be made to make the physical examination as easy for the men as possible. Men of draft age are accustomed to examinations, but that does not necessarily mean that they are fond of them. If, as is common practice, there are individual dressing booths, each man should see where he is going next before he is asked to prepare for examination. Asking a man to step into an ill-lighted booth, and leave his clothes behind with whatever valuables he may have with him, and then to step out into a room of which he knows nothing will certainly make him suspicious. A plan, which seems very successful, is to have the door by which the man enters lock from the inside and to let him lock it; also to have the door which leads into the examination room lock on the outside so that he cannot step out into that room until the doctor is ready for him. In this way there is ensured the same privacy as is found in any physician's office. A very satisfactory method of installing these booths is shown in Figure 2 on the previous page.

There should also be some scheme built into the layout of the examining room and the employment office so that there can be quick access from the interviewer to the medical examiner. No written records can possibly be the equivalent of a face to face conference. The examiner and the inter-

viewer necessarily are thinking of the man in different terms, one might almost say in different languages. In order, therefore, that the medical description be translated so as to have an effect on shop work there must be constant consultation, or else there will be a lack of coöperation. Constant association between doctor and interviewers will also bring about a proper respect for each other's abilities.

Many shops use passes which have on them a photograph of the man to whom they were issued. The time and place to take such a photograph is before a man leaves the employment department and as soon as his shop number can be assigned to him. That is, the man and his shop number should be photographed at the same time, otherwise it is very difficult to pick out the man's photograph. Any one who questions the wisdom of photographs on passes can confirm his judgment any time by taking a few passes to the different foremen and watchmen and ask them to name the men from their photographs. The effect of the portrait is largely psychological however and in this respect it is similar to the pass itself, for if a watchman becomes suspicious he cannot see any resemblance between photograph and owner, and if he is not suspicious he will not look at either.

Remote from such parts of the employment office there should be a place, usually with a small waiting room, for all kinds of interviews with men after they have begun work. This should be the place where men come with all their troubles and where men are sent by the foreman whenever disputes occur. In other words, it should not be possible for the rest of the employees to guess why a fellow worker has visited that room. This room should be used for men who want increases in pay, for men whose foremen think they should be dropped, for inquiries about income taxes, and for every purpose when men want an interview with some one representing the management. For that reason, whenever the plant is too large for all who seek such interviews to be seen by one man, the work should not be subdivided, but should be divided among the representatives of the management.

If there is a central file department for all employee relations activities, it should be located so as to be easy of access

both by telephone and by messenger, so that whoever needs information may get it at once. These files for rapid use should all be "top drawer files," or, better yet because cheaper, they should be open trays set on top of the files of the "dead cases." Just how long the "dead" files should be kept is an open question which is apt to be settled by the room that is available, but, generally speaking, it is very possible that men will show up after an absence of ten years or even more and very often after five years, so that no short term file will give all the information that is likely to be wanted.

This file room should not only give a complete history of the individual's connection with the company but it should also have an alphabetical index of those in the entire shop, so that telephone calls can be answered promptly. This can best be kept on a visible index so as to be easily and quickly consulted, but it is not and cannot be a substitute for the complete folder with all information about the man. It may, however, give a few of the outstanding facts which are constantly used. For example, it may give the man's nationality by birthplace, so that a complete census of the shop can be taken by running over the cards, and it should, of course, give the department in which he is working. A few such facts can be readily tabulated in this way, but an attempt to put a man's entire history on a card prevents all possibility of getting enough on to permit of a real study of employment conditions as they exist in the shop.

In addition to all these matters there is a great need of proximity to the safety engineering department, to the paymaster, to the time keepers, and to the hospital, because all of these departments should work together. Furthermore, the location of the employment department should be easy of access to outsiders and this usually means near the office. If the hiring of the office force is also part of the functions of the employment department, then its location should be such that office applicants can reach the employment department without going in by the same door which admits laborers and others. Its location, however, should also be selected with an eye to ease of access to the men after they are working in the shop.

## CHAPTER VI

### EMPLOYMENT FORMS

NINE out of every ten people who venture into employment management, either as employers or in the department itself, ask first of all for the available forms used by others of the profession. Forms are really the smallest part of the work. There can be a profitable employment department without any, and there can be unprofitable departments with the finest forms that can be devised. In other words, employment is a matter of judgment, intuition, and psychology, rather than a matter of rules.

In general there are three reasons for having forms. The first, that a record of the history of each employee may be available whenever the time comes for him to be promoted, transferred, or when he leaves the company; the second, that figures be available for statistical purposes in which the working force is treated of as a body and analyzed as to its married state, its housing, age, education, etc.; the third, that information be kept as a check on the employment department itself, to determine, for instance, whether or not its judgment was correct as to certain characteristics of the applicants. Under each of these heads there are of course many items concerning which the employment department should have complete and detailed information.

The proper classification of these items is given in Table 1 and it will be noted that the items refer only to applicants. Later it is probably worth while to follow up and keep a record of each man which will indicate how well the person who selected him did his work, and how keenly alive he was to the possibilities of making suitable placements. If an interviewer selects a man of great activity and initiative for a

job as a watchman he is as much in error as if he had selected a man of the sluggish type and no initiative to be an assistant in the engineering department. The records of the opinions which the interviewer formed are very valuable to him as time goes on and he discovers his own tendencies to overrate or underrate his impressions in different directions. This is especially true in hiring girls for both shop and office.

TABLE 1, CLASSIFICATION OF DATA REFERRING TO APPLICANTS

<i>Historical</i>	<i>Statistical</i>	<i>Check</i>
Name	Name	Name
Address	Address	Address
Shop number and department	Home address	Date of birth
Date of birth	Date of birth	Industrial history (complete)
Industrial history (three or more jobs)	Industrial history (three or more jobs)	Date of completion of school
Extent of education	Educational history	Desire to improve self
Nationality	Birthplace	Stability
Citizenship	of father	Sobriety
Married	of mother	Personal appearance
References	Citizenship	Courtesy
	First papers	Recreations
	Second papers	Hobbies
	Final papers	Avocations
	Married	Reading
	Single	Willingness to work
	Divorced	Knowledge of work
	Widower	Activity
	Children	Initiative
	Number	Loyalty
	Age	
	Sex	
	Working	
	Other dependents	
	Memberships	
	Company organizations	
	Unions	
	Societies	
	Political party	
	Church	
	Army	

The first column of Table 1 consists almost entirely of data which is likely to be called for at any time by the management of the concern or by governmental agencies. It is practically an essential minimum of information regarding the members of the force. Some firms do not keep any record of a man's industrial history, but nearly all do for the sake of

having a record to use when transfers take place. A few firms do not take any record of educational history, but in these days when Americanization is so important it seems desirable to know how much or how little schooling each man has had. Merely to assume that all foreigners are uneducated works great injustice to many well-educated men who are not yet familiar with the English language. In the case of higher positions it is necessary to have this data.

The question of the size and arrangement of the form to be used by the interviewer is one that is usually left to the employment manager. Some find a card, five by eight inches, most satisfactory, but in general it is better to use a sheet of paper not less than eight and one-half by eleven inches. The information to be put on this first interview card or sheet may cover as little as is covered by the first column of Table 1, or it may include all the items. There is an advantage in having all the information which may be required for statistical work on one side of the sheet, but the items marked "Check" may appear on the other without making the work cumbersome. It is also easier to read these cards, or any other similar records, if the items are arranged in columns rather than in solid text. It is probably better not to have any medical data appear on this card, not even height and weight though those may help to identify the man. A photograph, however, costs very little and is much better as a means of identification. So much for the interviewer's card, which is the one chiefly used and which carries the most information.

The next most important form is the one which the foreman uses in requisitioning help. Its exact form is of very little consequence but usually the policy of the office will determine whether a separate card or slip shall be made out for every man, or whether there shall be a blanket order calling for a given number of men of one grade. In any case, however, it is highly important that the requisition show with the greatest possible clearness exactly what the foreman wants. This can often be accomplished, depending of course on the industry, by printing on the request a list of the jobs for which men might be needed, and then all the foreman need do is check the list. The average foreman's hand writing is

generally poor, and this system may help the employment department a great deal. Furthermore, this requisition, if one is used for each applicant, may become a receipt for the man hired; that is the requisition may be sent to the foreman along with the applicant when he leaves the employment office, and if the foreman accepts him he then signs a printed statement to that effect on the back of the requisition and returns it to the employment department. In this way the form becomes a complete statement that the foreman needed a man and that he received one that was acceptable to him.

There should also be a form for requesting increases in pay. This is substantially a request to the cashier to change the rate of pay from one rate to another. The form should vary according to the plan adopted for putting through increases. If requests may start from a number of different sources there should be a place on the card for each of the different officials to sign. It is often the plan to place the initial step in the hands of any one of several men and in such cases the proposed raise does not become effective until signed by a certain number of them. Most of these men, however, sign in a very perfunctory way and there is, therefore, an advantage when making up these forms in providing for as few signatures as possible.

A transfer is frequently considered, as far as forms are concerned, as if the man left one department and were hired in another. In some cases a transfer card is made out noting that so-and-so has been transferred from one department to another and a place provided for both foremen to sign, indicating that they approve. This is not, however, a good system because it gives the foreman who is losing the man a chance to block the transfer even though it be temporarily.

During the time the man is in the shop he will have numerous articles in his possession which belong to the company. These may range from locker keys to perhaps a trombone or a base drum and in some places it is customary to take a receipt for all these articles and file it with the man's other records. Inasmuch, however, as it has little or no bearing on the man's standing, but is simply a memorandum to be used in making a settlement when he leaves, it would seem as if



it should be filed with the department which makes that final settlement, usually the paymaster or the cashier. No special form is needed for these receipts, though sometimes one is made up which contains the names of the different articles most often entrusted to the men.

When a man is absent or leaves the company there should be a form used for investigating such acts. Usually the first man who knows that a workman has left is his foreman or straw boss, or perhaps the time-keeper. It depends, of course, upon how the organization handles the work. In any case, whoever is responsible should notify the employment department. How soon such information should be sent to the employment department is a question whose answer depends upon the system employed. It varies in different shops, and also somewhat according to the case from a single day to a week. In times of great pressure men whose work is essential to the progress of production may even be "looked up" the same day they are reported out. A form for this may be a simple notice to the employment department that John Smith, Number 30 of Department K, is out, cause unknown, or if known, why, and should be investigated.

On this form there is usually a line on which the foreman may indicate, if he does not think the man suited to his work, the kind of work which he believes the man can do. Such information is usually of no value however for there are few foremen who will recommend a man for whom they have a dislike. This same notification to the employment department may also be used to report the investigation of the case. If the request of the foreman for the investigation and the results are on a single form there is thus brought together the complete history of the man's departure, and for future reference such information may be of value for it may happen that the man will want to come back. Inasmuch as the investigation is made in the employment department or by them there only needs to be enough blank space allowed for an explanation of, say, about fifty words.

In all the cases just mentioned the number of duplicate copies to be made depends on how many people have need of the information, and whether they want it merely for their

information or for their approval. As a general rule there is more paper laying around in different offices than there should be, and unless there is real use for duplicates it is better not to make them but to refer the person who occasionally wants the information to the file room where the original is kept.

If a folder is used in the file room, a form may be placed on the outside giving the most essential points of the man's connection with the firm. There should be, of course, the man's name and shop number, and if the number does not carry with it the department that should also be stated. The date of his entry into the employ of the concern should likewise be given and in addition the dates of any previous entries and exits. Whether the rates of wages at different times should appear in so prominent a place depends on how much the company believes in an open and above board method of doing business. It is, of course, easy to say that the rate of pay a man is getting is determined by agreement as an individual and therefore should be kept secret and confidential by the employer. On the other hand, it is very seldom that this is so, for usually it is well known around the shop what rate is being offered for different jobs, and if a man suspects that he is not being paid as much for his work as the firm is offering green hands he can very easily find out from the men who have gone in and applied for a job, or he can send one of his friends around to apply and find out for him. Then, too, if there is anything confidential about it, it is all on the side of the employer. Every man who gets a raise has to tell some one, and once told it is known to everybody. Whether this information goes on the outside of the folder or on the inside is, however, a matter of small import, but it should be so placed on record that the employment department with little effort may report from time to time that certain men should be investigated with a view to increasing their pay.

Finally, there are so many men who prefer to "quit" and look up another job rather than to go to their foremen and ask for an increase, that it is worth while for the employment department to keep track of them all and to see that at some stated interval they are investigated.

## CHAPTER VII

### TRADE AND MENTAL TESTS

**I**F an applicant for a job sees fit to lie about his previous experience there are two ways in which his misrepresentation may be discovered, one by finding out from his previous employers, the other by "trying him out." Former employers have little real interest in him and cannot be expected to pay sufficient attention to his case to do it justice. The inquiry is usually turned over to one person after another until finally some one is reached who has sufficient friendship, or enmity, for the man to interest himself in his case and so write a reply. This reply is thus seldom dictated by the disinterested party whom the inquirer would like to reach, and experience indicates that only a small proportion of these letters of inquiry are answered by responsible persons and that the answers which are received are not much more dependable than the original statements of the applicant. As a consequence employment managers have been inclined to consider the subject of trade tests as a substitute, and with the hope that they may prove to be useful.

Trade tests may be of several varieties, from catch questions, answerable only by people accustomed to the same nomenclature as the inquirer, to complete opportunities for "try-out" on the job. The same thing happens in using these tests, however, as is observed in our schools, namely, that there are certain people who are very good at passing examinations, and not especially well fitted for anything else, and there are others that go to pieces under pressure, and yet who can be depended upon to do their daily jobs successfully.

The very first requirement for a good trade test is that it shall not be presented in such a way as to make the man un-

der examination feel too keenly that he is being marked on the results of his work. When a man is asked catch questions he is likely to obtain a poor impression of the firm that will stoop to such child's play, and he is quite apt to leave in disgust. On the other hand, he may have the feeling that it will be easy to put almost anything over on them if he is employed. We might go still further and say that it is desirable to make every effort to avoid asking questions which, through ignorance of the man who wrote them, are catch questions. Such questions, of course, cannot be regarded as catch questions in the part of the country where they originated, but they are to men from another part of the country. For example, the names "monkey block" as applied to the compound slide of a lathe, and "housing" as applied to the uprights or posts of a planer may be misunderstood by men who can not only operate but build both machines. It is desirable, therefore, that all questions asked should be reviewed by men with broad acquaintance and experience so as to avoid colloquialisms such as these.

Another serious difficulty is that tests which consist of questions alone can usually be answered by men with a book-knowledge of the subject and nothing else. Some will reply that men having technical acquaintance with these trades will not apply, but that is offset by the large number who have started correspondence courses and gone far enough to know the implements of the trade. Such men find these written trade tests very simple, much more so in fact than holding the job afterwards.

The second type of trade test is one of action. If, for example, the man is asking for recognition as a cabinet maker, he is asked to make a dovetail joint and of course to do so by hand. If he is a blacksmith he is required to "turn" a horse shoe, or repair a diamond-point lathe tool. Similar tests are given in other trades and if, in the opinion of the expert in charge, the man does the job in a workmanlike manner he is accepted. There are, however, two objections to such tests: the first that most trade experts place quite as much importance upon the methods by which the work is done as upon the results obtained; and the second that trade tests

cannot be varied so much but that it is easy for outsiders to coach men to pass them in the same way that men are coached for civil service and other examinations.

The trade test which appears to give the most satisfaction is the test given while the man is "on the job" and at work on the product of the shop. That is, the man is hired conditionally, and put to work. If the foreman is the kind of man he should be, he gives this new man some rather simple work for a day or two until he gets used to the place, and then he gradually assigns more and more difficult work to him until he finds out the man's limitations. In this way two weeks may be consumed, if the man is as he represents himself to be, but if he is a "faker" this can usually be found out in a few days. If he is taken on as a beginner then of course his "tryout" term is somewhat longer. This tryout system produces good results only in the hands of a qualified foreman, for if he is below the average he may at once put the newcomer on the most difficult work the shop affords with the idea of "taking the starch out of him." In such cases the new man usually helps to increase the labor turnover. His separation from the company may be rated as due to "Incompetent" or "Left town" or "Got a better job," but it should really be classified to "Poor foremanship."

There is, nevertheless, some preliminary value to be derived from the results of trade tests, because such tests are easily varied, and will thus not be reduced to the coaching level. If the interviewer has himself worked at the trade he will use his experience to follow up any trifling statement which makes him suspect the applicant is not stating the truth. For example, a man who has run a planer of a certain make should be able to give a fair description of its feed mechanism even though he has run it for only a short time. On the other hand, a man may be a very good lathe hand and while working at it for years he might never have done any faceplate work. In such a case it would hardly do to turn him down because of his lack of familiarity with faceplate work, unless that were the specific kind of a job which he might have to do. It will not do to turn down an applicant for a job as a blacksmith because his hands are limber,

and he can bend them back of a straight line with his palm, for there are blacksmiths who do not “choke” the hammer handle, though we must admit they are rare. So it is with all trade tests, they must of necessity be the tests of the individual interviewer, otherwise commercial use will be made of them by people who tutor or coach their candidates.

There is still another reason why the interviewing should be done by a high-grade man, and it is this: such a man has great opportunities for saving money for the company. If he selects men nine times out of ten who are as good as represented, he is worth almost any sum he may name. If he gets them right half the time he is better than most managers. In spite however of all the trade tests he may develop, he will probably still continue to hire men on his estimate of their character, and if he is backed by foremen who will also give men of character a chance, he can safely take on many men who may be a disappointment at first, but who under sympathetic treatment, and proper instruction and guidance will make the best of workmen. It may be that we will ultimately come to think of all candidates for jobs as subjects for training, and that instead of hiring a man for a specific job, we will hire him because of his possibilities, and then train him so as to make the best possible use of his ability. If that time comes we will most certainly make use of the so-called psychological or mental tests.

Mental tests are unquestionably of great value, but it should always be borne in mind that there are two things which seem to have more to do with an individual's success than all the knowledge of specific detail, and these are his temperament and his ability to absorb information—in other words, his mental capacity. Temperament may be an inheritance, or it may be acquired, but in either case it is an asset or a handicap in a given man according to the work he is doing or the people by whom he is surrounded. A man may be capable of doing a large amount of work, but if he cannot do it in harmony with a given set of people he will have to find the right set or else work alone. Furthermore, his inability to work with that particular set does not prove that he lacks aptitude for the work.

It is an almost universal rule that refinement is accompanied by sensitiveness. A truck horse does not respond to the lash like a trotter, and a thoroughbred dog will hide from sight if cuffed lightly while the mongrel will have to be whipped into obedience. The same is true of man. The more capable a man is of fine work, the more easily is he led, and the harder driven. Those at the head of the organization do not always consider this fact. They themselves are surrounded with safeguards against intrusions, their secretaries keep undesirable visitors away, and they depend on their positions to prevent any unpleasant conversation in their inner sanctums. Under such conditions, it is only natural that they wonder at an occasional lapse of temper on the part of their subordinates, and they forget the time when they themselves were not so shielded, and when they also gave way under pressure. All men are human, and it is not possible for every one to shield himself from attack. If these executives could only see that they are throwing away many opportunities of developing good men, by trying to turn a sensitive employee into a thick-skinned one, they might find a hitherto unused source of profit. As it is, vocational guidance is futile in many instances, because after placing the right man at the right job he does not remain there because he has been placed with the wrong people. In the greater democracy toward which we are moving let us hope that we are going to get away from the autocracy of those who consider that, having made their dollars, they have thereby become a model by which the rest of the world should be molded.

Suppose, however, that we some day reach the stage where the right man doing the right work will find himself so placed that he can be happy in his surroundings. Then we will have the problem, not of finding a man trained for the work, but of finding a man fit to do the work who can be trained. Ability to absorb training depends on mental control of muscles and on capacity for understanding. Ability to do many things in a profitable way is dependent on ability to think quickly and accurately at the same time. These abilities can undoubtedly be discovered by test, but they are also subject to improvement by practice. It is possible to test the length of time for a

muscle to respond to the direction of the brain, and it is also possible to increase the speed of transmission as any athletic coach will testify, since the winning of many a sprint lies in the start which in turn depends on the speed with which the sound of the starter's pistol is transmitted to the leg muscles of the runner.

Mental tests are of many kinds, and all have some desirable qualities. They usually include tests for memory. One such test is as follows: A page of portraits of men and women with their names printed under them is given to the applicant, also another page which contains the same portraits but in a different order and without the names. The applicant is given a certain time in which to study the named portraits and then an equal time in which to give the right names to them in their rearranged order without consulting the named portraits. This corresponds closely to introducing people to the candidate and then asking him later to identify them. This, however, is a very incomplete test of memory, as much so as it would be to ask the candidate to memorize a stanza of poetry. A test of memory should be varied, as many a man with no memory for faces never forgets a telephone number or a price quotation, and a great many boys with the worst possible remembrance for dates can tell the score in every big league game for a month back. Memory tests should be directed through the eye by means of pictures, maps, figures, dates, etc.; through the ear by means of oral dictation; through the nose by means of the sense of smell, and through the feeling by means of the work for which the man is being chosen to do. The man whose work will require him to remember color combinations or musical scores should not however be tested as to memory by being asked to compare one set of portraits with another.

Then there is the familiar test for definition of words taken at random, or for example from the bottom of the last column on every tenth page of the dictionary. This tests vocabulary, and also curiosity, for words selected in this way inevitably include many which no workman or even office man can count as an asset. The shoemaker who goes through life thinking that the word "secular" relates to the "sexes" or to



“sects” will undoubtedly do just as good a bit of shoe repairing as if he had had the curiosity to look up the word.

There is also the concentration test in which one is instructed to do numerous utterly foolish things, and if this test is given to an adult he will usually be so amused or disgusted with the test that he will not make a good showing. It proves however much or little according to the spirit in which it is undertaken. A better test is to fold a piece of paper three or four ways into triangles and ask the candidate to fold his piece the same way. This tests both the powers of imitation and the ability to concentrate, and the test can be varied so that men cannot be coached. Another mental test requires one to name the opposite of any word, as: now—later; black—white; hot—cold; etc. Matching of proverbs, which indicates to a considerable degree the amount of thinking men have done, is likewise a favorite test and an excellent one if undertaken in the right spirit, but one which usually strikes the humor of the candidate rather than his sense of responsibility.

It is almost impossible to take one of these tests with the thought that any one would make the hiring of a man depend on them. This does not mean, however, that out of them all no good can come. On the contrary, it should result in sets of easily variable tests which will disclose the thinking powers of the candidate, and show whether he has the mental ability to learn. As a test of attainment they do not seem promising, but as a test of ability to learn they should have a real value.

## CHAPTER VIII

### RATING LABOR TURNOVER

THE subject of rating labor turnover has had vastly more attention than it deserves, and yet a book of this kind is hardly complete without some reference to the methods employed. Practically all the methods in use are based on zero as perfection. That is, no labor turnover is the ultimate goal. Usually it can only be reached over brief periods of time, although a shop with a few mature and experienced mechanics may not lose a man for a year's time. Its record is, therefore, perfect, although perfection is most commonly thought of as 100 per cent. The methods of computing labor turnover are analogous to those employed in determining the turnover of goods in a store or market. There a man turns over his stock once, twice, or three times a year. In our shop we also turn over our working force once, twice, or three times a year and call it 100, 200, or 300 per cent, as the case may be. That is, a complete change of help each year becomes the 100 per cent labor turnover. From this, together with our experience, we have rather come to think of a 100 per cent turnover as the normal thing and any one whose rate for the year is greater or less is quickly called upon to explain. The shop whose turnover is 500 per cent is bad. Why is it? If it is 50 per cent, please also explain. Do they keep men they ought to discharge? Do they pay more than the market rate of wages? What is the matter?

Practically every one agrees in their method of figuring labor turnover up to the point that it is some kind of change of help per year divided by the normal force for that year. Beyond that all is disagreement, but the basis of all these methods is the use of zero as perfection, and the custom is

probably too deeply rooted to be upset now no matter how thoroughly we may believe it to be wrong. The greatest objection to it, however, is the tendency to look on a 100 per cent turnover as being near enough to perfection and the fact that comparisons based on labor turnover without analysis are not apt to be fair. The greatest gain that is likely to be made is in the analysis of turnover. If we have a thousand sick men in a hospital we know how many beds we must provide, and we know roughly how large the building must be, but until we know what ails them we can do very little toward curing them. Just so, if we know how large the labor turnover is in a given shop we can tell how large a room must be provided for the employment department, and how many interviews will be needed, but we have no help from the gross percentage of turnover to aid us in finding the cure.

An analysis according to departments shows the personal relations between foreman, working conditions, and the men. An analysis of causes of leaving shows impersonal remedial measures. An analysis of the men's condition of life gives us a line on future hirings and it usually indicates a preference for married men. An analysis of applicants and employees accepted gives a line on the state of the labor market and in general we wish to know how many laborers without technical knowledge of the simplest sort are applying and taken in, how many learners, and how many experienced men. We also like to know of each of these groups how many of them are rehired and how many are new. It is better to make the division between learners and experienced men, because the customary division between skilled and semi-skilled has a different significance to each man who makes an analysis, while we usually know when we hire a man whether we expect to train him for some job or whether he is fitted to step directly into it. If the latter, he expects to be retained only if he makes good without training; but if the former, he is not expected to make much of a showing until he has had a more or less definite time in which to learn his work. In this connection Figures 3 and 4 on the following pages are of interest as they illustrate different types of forms used in recording labor turnover.



RECORD OF TURNOVER															MONTH _____ YEAR _____	
COMPANY <u>NORTON COMPANY</u>																
ENTRANCES																
DEPARTMENTS																
NEW																
RE-EMPLOYED																
TRANSFERRED																
LEFT OF OWN ACCORD																
WORKING CONDITIONS																
LOCATION																
OTHER REASONS																
DISCHARGED																
LAI-D OFF																
TRANSFERRED																
UNAVOIDABLE																
TOTAL ENTRANCES																
TOTAL EXITS																
Per Cent																
Never Reported																

LABOR TURNOVER RECORD.															L.H. SHATTUCK, INC.														
EMPLOYMENT REPORT FOR WEEK ENDING _____															REASONS FOR DEPARTURES														
TOTAL															TOTAL														
LEFT DAY NIGHT															LEFT DAY NIGHT														
DISCHARGED DAY NIGHT															DISCHARGED DAY NIGHT														
TOTAL															TOTAL														
Hired DAY NIGHT															Hired DAY NIGHT														
DEPT															DEPT														
TOTALS															TOTALS														
BOAT NO.															BOAT NO.														
TOTALS															TOTALS														
TOTAL HIRED															TOTAL HIRED														
TOTAL DEPARTED															TOTAL DEPARTED														
TOTAL ATTENDANCE															TOTAL ATTENDANCE														
AVERAGE ATTENDANCE															AVERAGE ATTENDANCE														
TURNOVER															TURNOVER														
EMPLOYMENT DEPARTMENT															EMPLOYMENT DEPARTMENT														

FIGURE 4. LABOR TURNOVER RECORD FORMS USED BY L. H. SHATTUCK, INC., AND THE NORTON COMPANY.

Once an analysis is made there is a basis for comparison within the shop, which is much more valuable than a comparison between shops. We keep comparative cost accounts for this same purpose. We do not go out and advertise from the housetops that our costs per ton or gross are so much or so little, but we do watch the fluctuation of cost from month to month between departments, and we do so with profit. To be sure, if we stop making so much of percentage of labor turnover we give up a strong talking point for employment management, for it is possible to show that if a given firm's labor turnover is reduced from 200 to 100 per cent and they have 5000 men they have thus saved the training of 5000 per year, which at \$100 each is a saving of a half million dollars. While this is undoubtedly true, yet because that particular half million is not segregated, and because it may be more than the whole year's net profit, it makes it difficult for the employment manager to get even a hundred dollars added to his salary on account of the saving.

The whole theory that employment management cuts down labor turnover is reluctantly accepted by proprietors. The employment department does not cut down labor turnover. By making itself a perfect nuisance the employment department can get reforms installed in various departments of the shop which will reduce labor turnover, but in very few if any instances is it placed in a position to put those reforms in operation. The choice and selection of men and vocational guidance are the only means that are completely enough in their hands to effect a tangible result. If the interviewers are sufficiently well acquainted with the different foremen so that they can send to each department the type of men whom its foremen will give adequate attention, it can in this way reduce labor turnover decidedly over what it will be if men are suited to the work, but not to the foreman. The work, however, may not be done as well nor as efficiently, but the turnover will be less. On the other hand, working conditions, hours, wages, and methods of paying, etc., are only the subject of advice on the part of the employment manager. In other words, the value of an employment department is not necessarily expressed in terms of reduction of labor turnover,

for the total turnover for a shop does not express anything that is of real value to any branch of the organization.

As previously stated, labor turnover is quite generally agreed upon to be changes of employees over a year's time divided by total employees. The disagreements arise over whether change shall be expressed by numbers leaving, coming, or by replacements. Also whether unavoidable changes shall be neglected, and whether the denominator of the fraction shall be actual men working full time and totaled day by day or whether a rougher approximation shall be used. To some it seems that the number of hirings should be used, because that is the apparent fundamental reason for having an employment department; hiring, however, costs but little. Others say that the number of those leaving should be used, because that is the loss, and the loss of men adds to the shop expense. Still others, and among them the writer, believe that replacements should be used, because the greatest cost of labor turnover lies in the cost of training, and actually only those who are hired to replace those who have left represent labor turnover. If, for example, a shop is growing in size, no employment department can keep the number hired below the number required to increase the force and it should not in any sense be charged with the cost of hiring and training these men. To be sure, expansion of business is accompanied by a certain cost of training an additional number of men, but such costs should be considered by the sales department before it decides upon making the effort to increase the sales, and it is almost certain that the cost of the product will be burdened with a greater cost for training men because of the expansion of business. That is, in order to increase the force by a hundred men it may be necessary to train or partly train five hundred. The first hundred, or rather the hundred who finally remain, should be a charge to the expansion, but the other four hundred who were wrongly selected should be a charge against the employment department, or such other department as contributed to the causes which led these four hundred to terminate their connection.

Let us now consider the case of a shop which is experiencing a decrease of business. If it must decrease its force by

one hundred men and it discharges them, then the employment department should not be charged with what it had previously cost to train those men, because it had already been charged with that cost once before when they were hired and the cost of their training incurred. If, however, in the process of decrease two hundred men left and one hundred who were hired were taken on to replace another hundred who were not discharged, and whose dismissal was not contemplated, then the employment department should be charged with cost of replacing that hundred men who were lost unintentionally. Many claim, however, that all men hired have to be trained and, therefore, they bring an expense on the firm which should be charged against the employment department. Others claim that the men leaving should be used as a basis, on the ground that they were an asset, as the result of an investment, and that their leaving is a loss. Both are right to a certain extent, but neither of these latter plans takes into account the fact that expansion or contraction of a business is not usually within the scope of the employment department, and that it is either good management which allows the expansion or bad luck which necessitates contraction. It is true that the firm which expands unduly may have to contract, and equally so that the firm that contracts may expand. Over long periods of time, however, the contraction or expansion becomes only a small matter compared with the total flow. For example, a shop begins with 1000 men and increases 100 men per year for ten years. During that time it maintains a turnover of nearly 200 per cent. It will, therefore, take in 30,000 people and lose 29,000, and its turnover figured by three methods, whose differences are so small as to be negligible, are therefore as follows:

Replacements .....	$\frac{29,000}{1,550} \div 10 = 187\%$
Hirings .....	$\frac{30,000}{1,550} \div 10 = 193\%$
Leavings .....	$\frac{29,000}{1,550} \div 10 = 187\%$



The different methods of obtaining the denominator likewise change the result but slightly. It should be kept in mind that the number of men on the payroll cannot be above the number of places or stations in the shop. The number of stations vacant may be considerable, but if the average attendance is 90 per cent this does not mean that it is safe to put on a force of 110 per cent of the number of stations because on Wednesdays and Thursdays there will be nearly 100 per cent attendance. That is, the shop equipment must be such as to carry the peak load of employees the days they are present. Therefore, it would seem as though the total number of names on the payroll is a reasonable basis for computation, and to arrive at an average of this number over a period of a year it is usually near enough to take the average of those on the payroll at the first of each month. This is, of course, on the assumption that the names of employees that have left are promptly dropped from the payroll.

The question of unavoidable losses is not a large one. Death claims but few. Minors have to change at the bidding of their parents. Employees also become superannuated. All these, however, are but "a drop in the bucket" compared with the great numbers who leave because they think they can better themselves. Consequently labor turnover computed by dividing the number of those who leave by the number of those who are on the pay list month by month or week by week gives as nearly a correct figure of labor turnover as one obtained by any other means.

In this connection an illustration of the method of computing the cost of labor turnover might prove of interest, and the following specific case is accordingly presented in the hopes that it may arouse discussion. The figures are actual but the names are fictitious. The problem is to determine what it cost the Blank Manufacturing Company to allow John Smith to leave and to fill his place with John Doe. It is a simple case in that only the one attempt was necessary to fill the job. The wages paid to Doe are shown graphically in Figure 5. We are neglecting any mention of the actual cost of handling the separation of Smith from the company, and the discovering and hiring of Doe, for each of these operations costs on the

average a little less than a dollar, and they may well be neglected inasmuch that we are by no means sure within many dollars of the other costs.

It will be seen by Figure 5 that during the time Doe was learning we paid him \$49.81 more at day rates than he would have received if we had paid him at piece-work rates. This, we are sure, is a part of the cost of replacing Smith. Also, at the time this change took place, we find that we made an acceptable profit when our piece workers were making 40 cents per hour. The only excuse for retaining men making less

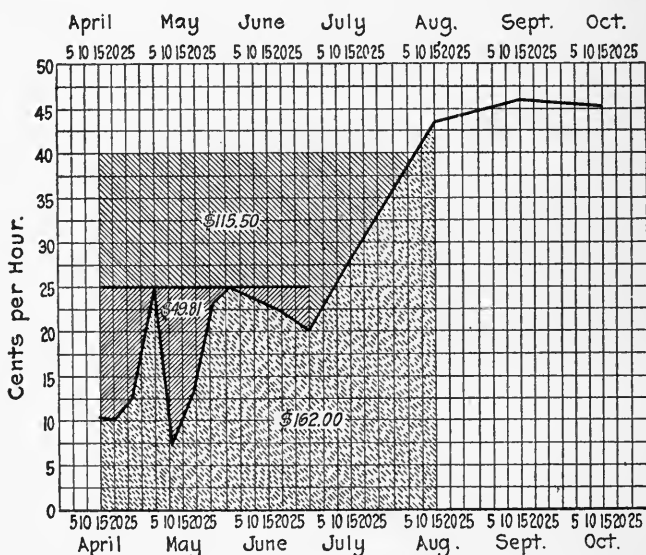


FIGURE 5. GRAPHIC REPRESENTATION OF WAGES PAID TO JOHN DOE.

than that was that they were learners and could be expected to make more later on, so that they would repay us for the loss in production. During the time before Doe reached the 40-cent rate we would have paid him, if he had been a normal producer, \$115.50 in addition to the \$49.81 mentioned. During all this time our manufacturing overhead was practically a dollar an hour. From the time he came with us until he passed the 40-cent rate the overhead charges totaled \$800, which, however, must be spread over the \$162 worth of work which he actually did, or practically 500 per cent overhead

against 250 per cent for the average man. From this we conclude that one-half of this \$800 for overhead charges has been wasted and so we add to the account against the change \$400 less the \$115.50 mentioned above. The total cost for the training period by this method of computation would then be:

Paid hour rate above piece rate earnings .....	\$49.81
Excess overhead charge incurred .....	284.50
	<hr/>
	\$334.31

Another way in which this may be figured, but which seems to make it still more expensive to change help, is as follows:

Total wages paid Smith while reaching normal productivity .....	\$211.75
Overhead paid during that time per man ....	800.00
	<hr/>
	\$1011.75
Value of work done .....	\$162.00
Overhead which would have been paid if it had been done by Doe, 250 per cent .....	405.00
	<hr/>
	567.00
	<hr/>
	\$444.75

Possibly this second method is not only less involved but also more nearly correct. It has seemed to the writer that it was better to put all the expenses, outside of actual training, under the general charge of overhead as that is where they show in most accounting systems. If we attempt to pick out all the items of spoiled work, damaged tools and machinery, additional expense for accidents and so on, we get into a maze of uncertainty. Neither of the methods suggested above may be the best but if we wish to value the work of service departments we must do it on some approximate basis which uses the material offered by the regular accounting system of the factory, and which can be applied both to individual cases and to department turnover as a whole. The case cited is one in which the payment of piece rates with an hourly rate during part of the learning time simplifies the problem of earn-

ings, but except in new jobs it should be possible, under any modern system of cost keeping, to compare a man's actual earnings with those which are average, or necessary to the running of the shop on a fair profit.

Coupled with labor turnover and subject to some of the same limitations is tardiness. This is figured on a percentage basis from number of people late and number of opportunities. For example, if 15 people are late once a day in a shop with 1000 present, the percentage of tardiness would be figured by dividing 15, the number of tardinesses, by 2000, the number of opportunities, or  $\frac{3}{4}$  of 1 per cent. Percentage of tardiness is also figured on the basis of total number on the payroll, which is much more easily done and just as accurate. It, too, is of value only when used to decrease tardiness and that it cannot do unless the reasons for tardiness are known. For example, as happens occasionally, the company arranges car service to the factory in the morning and the cars do not reach the factory on time, then the management should be called to account rather than the people who are late. What happens, however, is that the foreman or head of the department does not have access to the management and would not dare tell them the truth if he did, so he makes it unpleasant for the subordinates, and quite likely at the very same time some member of the management is telling some enthusiastic convention how efficiently they handle transportation for their employees.

As in the case of labor turnover comparisons with other plants have only a slight value as compared with analysis between departments or analysis by distances traveled. The latter is apt to show that there are certain car lines and certain distances have their high percentage of tardiness. People who live next door, especially if they are married, cannot be expected to be prompt. There are a multitude of little things around the house that "hubby" can do so easily in the last two or three minutes, which take fifteen. The most reliable man is the man who lives the furthest and has the least dependable transportation. He starts about two cars too early.

## CHAPTER IX

### HAS THE EMPLOYMENT DEPARTMENT ANY PART IN THE DEMOCRATIZATION OF INDUSTRY?

**A**N employment department is a hiring agency, for it discovers and selects men and women for the jobs which the company offers. This is its preliminary function. It has, however, added little by little to its duties until now its ambition, realized in a few instances, is to become the connecting link, the diplomatic channel, between employee and employer. In other words, the employment department now aims to take up one of the most important functions of foremanship as it was formerly understood, and unless foremen rise to their opportunities better than they have in past years some such change is inevitable.

The democratization of industry, when one gets close to it and looks it squarely in the eye, is not the "bug-a-boo" that some have feared, for it is apparent now it merely means that instead of the management getting its information as to the state of mind of its employees through foremen and a few isolated workmen, all anxious to say something that will please, it will get such information through workmen's committees. The information will thus be authoritative rather than conjectural, and instead of the men letting grievances go until their imaginations make mountains of them, there will be earnest and serious consideration by both parties before any blows are struck.

Who is in a better position to represent the management in this process of getting together than the employment department? It has tried, and tried honestly in almost all cases, to be impartial and to take the place of shop committees as well as act for the management. It cannot, however, do both,

for its very existence depends solely on the management. Its self-interest is thus with the management, and no matter how broad-minded it may be, this necessity compels loyalty even where its best judgment and sympathies are with the men in the shops. Nevertheless as a body to represent the management, the employment department is ideally placed, because it has, or should have, sufficient knowledge of the financial condition of the company to know what wages it can pay for a given production, or how much it can expend on improved working conditions.

For example, if a building costing hundreds of thousands of dollars has been built in such a location that it shuts off air and light from another building where the work generates great heat, the working conditions may become unbearable and an individual strike may soon be in full sway. If, however, the interests of the workmen had been consulted, the building would never have been placed there, and if the management had realized that the increased labor turnover caused by this proximity would cost them more every year than the building did, they would not have built it either. But there was no one to warn them. The workmen did not know the building was planned until the contract was let, and even then they did not know how high it was going to be until the contractor laid the roof timbers. The same is true in many, many activities. The management is so sure of itself and its superior minds that it fails to realize that in the shop are many men who may later rise to put them out of business, just as they passed and left behind the men who were so sure they knew it all in the preceding generation. It would seem as though any management would be anxious to secure the cooperation of all the ability in the organization. Few, however, see it in that light, sometimes because they cannot see any ability to recognize, and sometimes because they are afraid that if they do recognize it, others will think that they themselves are slipping behind.

Another reason why ability is often not recognized is the fact that there is still a feeling that individual property rights are necessary. For instance, a man starts a business, it grows and he takes in a few trusted employees or some friends with

some money, always retaining, however, 51 per cent or more of the stock. He does not necessarily select these men for their ability, but often for their social qualities or to please his wife, or for some other equally unscientific reason. Having surrounded himself with a few choice friends, he may next decide to sell more stock and to sell it in the market so that he and his friends may still control the business by trusting to luck that the purchasers will never bother to attend a stockholders' meeting. During all of this development he has seen to it that he has taken no visible chance of losing control. It is still his business and he talks about it as such, and the moment a suggestion is made that employees be allowed to purchase stock, his hands go up in holy horror. What if they should at some distant date acquire control? Then He would be out and chaos would reign. To him it is a horrible and incomprehensible situation. He cannot understand how any one else could conduct the business successfully. His own sons, bright though they may be in other people's minds, could not possibly do it. It is safer to let them play golf and travel on his earnings than to "let them monkey around the works." Or if they do come in they must be held at drudgery until they lose all spirit and get to believe that the old way is the only way. Under these conditions with this feeling of intense egotism controlling so many industries, is it any wonder that industrial democracy makes slow headway?

It must also be admitted that such examples as we have had of shops and stores turned over to employees has not been altogether reassuring. Coöperative stores are perhaps among the most marked examples of enterprises conducted by workmen and clubs for their own benefit. They seldom run for any great length of time. Those that do are usually found to have been dominated by some one leader who proved to be a better organizer and manager than even he suspected. He has become just as truly the owner of the store as the man across the street who has his own name on the sign. His associates do not overthrow him because they are afraid they cannot get any one else to run it, or because they cannot agree among themselves as to his successor. The fundamental trouble seems to be that they cannot agree, any more than

other people can, to pay any one a salary in excess of what they are getting themselves. If industrial democracy is to succeed, workmen will have to be educated to see that men whose ability makes it possible for them to produce more should receive a greater compensation. The coxswain in an eight-oar shell is a little insignificant fellow and he looks like excess baggage. And yet in a race he is worth at least as much as any of the oarsmen.

This education of the workmen ought to have been going on for years. Nothing has been done, however, and now as a result we are in serious danger of seeing many experiments in democratization fail. Shop committees will likely be formed and then they will make the most preposterous demand that salaries of executives be reduced, and that can only result in many changes, for such men will not be reduced. They will prefer to leave and take a position elsewhere even if at a lower salary, or they may very likely become producers themselves. In their places will be put men who are in the favor of the men on the shop committee, chosen, like the circle of friends around the original proprietor, for qualities other than business ability. The result must inevitably be a lessened efficiency, a still greater increase in the cost of living, and an all-around imitation of the ills of government in a republic. In the long run, workmen will become educated, they will elect capable men as leaders and there will be no apparent change from present conditions. Workmen will acquire the same apathy that stockholders now have and will not attend meetings or even read balance sheets, unless they show that a dividend must be passed. But during the transition period, if it comes, we will have to pay heavily for the luxury of democratization just as we now pay heavily for everything that is managed by the government.

Possibly there may be redeeming features. Possibly there will be greater honesty in the goods produced. Where every one knows what is going on, evil doing is exposed at once, for only a small group can carry on underhanded schemes. There will be less work done under unhealthful conditions, there will be an unearthing of a great many petty faults of foremen that have hitherto been glanced over, but the net result



for some time to come cannot help but be an increase of the high cost of living. It should finally be borne in mind that we have practically worked under a scheme of democratization so far as production is concerned all during the war. Foremen then did not increase production by loud talk. They were only able to get it by offering good facilities for doing the work and paying extremely well for getting it done.



## PART II

### PROBLEMS OF THE EMPLOYMENT MANAGER

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## CHAPTER X

### DEVELOPING THE LABOR SUPPLY

**I**NDUSTRIAL history is a record of alternate feast and famine, whether we look at the labor problem from the point of view of employer or employee. The periods of exact adjustment of supply to demand have been few and passing. In a primitive state every one worked as hard and as long as he chose, and he lived well or poorly according as he worked hard, long, and effectively or the reverse. There was the advantage, however, that no one suffered for lack of opportunity, no matter how much he might lack in comfort or luxury.

One of the penalties of the capitalistic scheme of organization is that every time the workers take a real hand in government capital becomes afraid, and draws in its credits until the storm has passed, and since most business is done on credit, its contraction is fatal to employment. If, on the other hand, credit is good, and the money owners have the upper hand and feel sure of it, then the mad rush of those who know that their capital produces a demand for more labor than is available creates bidding for it. Stable firms whose product will not stand an increase in price go to the wall. Confidence is lost, credit is withdrawn, and the circle of events starts all over again. Thus far in human experience there seems to be no way to avoid this cycle. Whatever party is in power is of course controlled by human beings and human beings nearly always abuse power.

This is not all bad. It is better to clean house occasionally than to live always in the accumulated litter of years. We wonder how long it will be before we learn to keep the house of business clean day by day. These fluctuations in demand do not create equal or even similar changes in the supply.

The same number of potential workers are living each day without regard to the opportunities for them to labor.

What happens to those whose work is not needed by capital in dull times? Where does the supply come from in flush times? The normal division of workers and non-workers in the United States is approximately as follows: <sup>1</sup>

Workers	Per cent.
Men .....	30
Women .....	8
Non-Workers	
Children 16 and under.....	10
Men and women over 55.....	5
Men and women parasites.....	26
Men and women crippled and disabled.....	1
Women in homes.....	20
	<hr/>
	100

When times are dull and the shops, stores, and factories are releasing employees, the percentage of men and women working decreases, a small percentage go into the column of parasites, either as loafers, going to school (all schools gain some from this cause and lose others for causes discussed later) or idling at home, helping mother, etc. A few women marry for a home, but the large number shift about from one job to another until they drive out the least firmly attached people, the women who have homes but who work casually.

When there is great demand for labor it brings out all these people and makes additional calls on the parasitic class, takes many children from school and to a small extent draws on the men past fifty-five years of age who had considered themselves beyond employment. There are two exceptions: thrifty people take advantage of flush times to marry because they can afford it; or if they are married and have children, send them to better or more advanced schools because they likewise can afford it.

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<sup>1</sup>The accuracy of this division is not vouched for except as a suitable basis for discussion.

Seemingly, we have always made the mistake of thinking of the labor supply as something tangible, that could and should be stabilized and brought to rest. We are learning now to think of it as a stream, flowing sometimes in a destructive torrent, sometimes quiescent, but seldom decaying from stagnation. Flow is necessary and desirable; without it progress is impossible, but the flow must be controlled so that it will not work harm to itself.

Employers are unwittingly as much the cause of violent movement among their workers as the employees themselves. It is customary to blame workers for undue unrest and to assume they should be blind and deaf to the frantic appeals of competitors for their labor, while as a matter of fact each employer is doing the same thing in his own way. Some work quietly; others with large advertisements and much overstatement of advantages to the prospective worker.

It has always been our custom to plant a new industry at a point selected for its shipping facilities, raw material supply, market, etc., and to trust to luck and strong-arm methods to secure the necessary workmen. From now on we shall have to consider the labor market, for labor has tasted the raw meat of power; it likes the taste and craves more. So we have to consider the flow of labor in very much the same way as we do friction, very valuable when we want to put on the brakes, and a hindrance when we are putting on all steam to go ahead. There are certain fairly definite things which tend to decrease the mobility of labor which we sometimes wish we did not have to consider. The first of these, and the one which has produced the greatest trouble when overlooked, is racial.

We have before us every moment the regret for having brought in the negro race, quite as much on their account as our own. It is a constant warning against our bringing in the yellow races. Any race with whom inter-marriage is productive of questionable results must sometimes feel that we have allowed them to look into the promised land and then barred the way. China is no doubt swarming with men able to do much of the work which we have wanted done, and willing and able to do it for a very much lower wage than the

European races. It would be easy to let them in, but past experience shows plainly the impossibility of sending them back when the need is over. In other words, they do not add to the elasticity of the labor supply. What is to constitute the final solution of this problem is difficult to imagine.

The problem of industry, which was brought to the front by the war, is how to get the purely laboring work of the world done when opportunity is open for as many as can do work involving some mental action. Our industries have been so reorganized that work which was formerly done by fairly skilled labor is now being done by men whom we formerly thought capable of nothing beyond hewing wood and drawing water. This so depleted the ranks of the purely laboring classes that in many instances it was necessary to pay more for unskilled labor than for skilled, and oftentimes a totally unskilled man pushed his income above that of many professional men, notably teachers and ministers, so that many of the latter left their professions and became actual producers.

Another of the influences preventing the desirable flow of labor is the attachment which many people have for their homes. The great influx of Europeans which preceded the war might seem to indicate that no great attachment influenced Europe; but the quality of those who came to work compared with those who came as visitors makes it necessary for us to revise our estimate of the European population. The very type which would have made us the best workers quite largely stayed at home. The vigor with which the French and Italians and the other invaded nations fought, definitely determines this fact. Even in our country we have to realize that there are large colonies of certain races in certain cities who are little disturbed by advertisements for "Help Wanted" in other and near-by cities. They live together, work together and, if they move at all, move together.

A third important item is lack of versatility. A machinist or a shoe worker can find work and accomplish as much in one portion of the country as another, but the very decided specialization into which industry has developed has brought a vast number of men and women into our industries who know only enough to perform a single operation, and that only



when the machine which they are using works perfectly. Such people can only go down the scale, unless money is expended to teach them a new operation. As a war measure, the so-called vestibule school, teaching only operations and not principles, was desirable and profitable both in money and results. As a peace measure it helps to steady the flow from industry to industry, but it also greatly adds to the difficulty of making transfers of labor in the interest of the community as a whole.

These three principal obstacles to the mobility of labor—the race problem, the love of home, and the lack of versatility—add to the difficulty of expanding or contracting business. If business is expanding above the normal, we are faced with (1) the temptation to import the yellow man, (2) the fact that the better class of workers are attached to a home, and prefer demotion to change, and (3) we find the expense of reëducating large numbers of employees to be very large. If business is decreasing, we are confronted with (1) a large supply of people whose homes in foreign lands do not attract them once they have tasted our life, (2) those who own or are attached to their homes cannot and will not move where there are better opportunities, and (3) those who have learned to do only one thing find themselves totally unfitted for change. The natural result is unemployment and loss in purchasing power, which reacts making business still poorer and poorer, until the disease has run its course, people economize and we once more build up and call out the working reserves.

A cure for this lies in the creation of a large reserve of men and women capable of doing several things, capable because they know fundamental principles. Their training is the duty of the nation, because if they are to be mobile and able to equalize working conditions, they must be ready to pass state borders and go wherever the great demand exists. We already have a great body of men possessed of the wanderlust who may seem at first sight to fulfill this need, but such is not the case because they are simply travelers going from place to place without thought of shortage of labor, to-day appearing where there are already more workers than can be employed, and to-morrow leaving places where there are al-

most none, stopping only long enough to accumulate the fare to the next town, and with no regard to the needs of the community or the industry.

We need a "flying squadron" of workers who would correspond in the worker's world to money in the financial world. A few mobile and controlled people could steady employment just as a small amount of real money serves to pay the balances of the checks sent back and forth between banks. There is, however, no escape for the shortage of unskilled labor except the decrease of business, if we stick to our intent to leave out the yellow races. We can resort to high wages on the principle, not usually accepted that the person who does disagreeable things should be paid a bonus for doing them. If everybody worked solely for the love of work, then the above principle would apply and the president of the company would draw the smallest salary; but only recently have we seen any such leaning, and that only to a limited extent. The remaining alternative, and the one which our industrial history indicates to be most successful, is to do away with the necessity for unskilled labor.

After all, our most expensive work, the work which gives us the least return in satisfaction, is the lifting and carrying done by man power. Unloading cars of coal or other similar materials by shoveling over the sides seems a wilful waste when we know how to dump them by machinery which only requires the release of a lever or turning a switch. One man, who may very well be a cripple in many ways, can do the work which a dozen laborers would do. It seems wrong also to ask any man to lift burdens which might be raised by power; yet we have to admit that for some time to come we will have mental defectives who seem incapable of doing work which requires mental strength above the lowest order. It should be possible, however, to so arrange our plants that the percentage of such defectives would be closely related to the purely laboring work to be done.

Some reader may be impatient and say, "Why concern ourselves about the world supply of workers? What we need is more people to-morrow in our own plant." While this is true, no one should make plans for large individual expansion

of production until he has given careful consideration to what would happen if every one should begin to expand equally. We ought not to open new branches, or build new factories depending on deliberately drawing employees away from other plants near or far away.

It is hardly conceivable that a town will attempt to secure a new manufacturing business when its Board of Trade knows that its population is very nearly 100 per cent employed. As soon as the new shop opens its doors, natural curiosity draws many workers from other local factories. These people for the most part are those who are discontented and men whom their employers can profitably release. Nevertheless, it immediately raises a storm of protest from the older shops, who accuse the new shop of "stealing help," so they retaliate by deliberately offering inducements for some of the very men whose absence from their plants was profitable to come back. This goes on until all raise their rates as high as they dare, about which time a supply of workers begins to flow in from outside towns and everybody gets all the men they need and everybody is satisfied, except the people from the outside towns. Inasmuch as the employers seldom have any means of knowing where their men go when they leave; they do not know where to direct their complaints.

The fact that the suffering firm is not able to protest does not, however, make it right for some one else to offer imaginary or temporary inducements to its employees. Such removals of men from one city to another only cost time and money, and in the end serve no useful purpose. Reprisals are easy and frequent. Such reprisals only serve to create wage conditions that are unfortunate, because they inflate workmen's ideas of their worth and get them into habits of spending more than they earn, which habits are not easily dropped when the inevitable deflation of business comes.

All this applies, of course, to the artificial bidding up of rates and not to rates increased to correspond with increased earnings. Just so long as employers strive to induce employees to leave each other for money consideration rather than for better opportunity, we shall have unrest, discontent, and distrust. Men who have worked for a firm for several years, who

have asked for higher wages and been refused, cannot help being suspicious when under such conditions they find other men offered 10, 20, or 50 per cent more money to come in and work beside them.

Since in the end expansion of business as a whole can only be accomplished by an increased amount of work done, there are only two legitimate ways in which it can be accomplished: (1) By bringing out labor which has for the time being retired. (2) By each individual doing more work. To accomplish the result in either way it is only necessary to offer better opportunity for men to earn money. Every increase in opportunity to earn draws out a few more people who do not work when wages are low, because they work so slowly as to create an undue overhead charge. Every increase in the amount of work which it is possible to place before workers in such a way that they can accomplish it brings added production.

Certain types of people when offered overtime work will overwork until they are worn out. These same people offered larger wages for a given amount of work will loaf a part of the time, usually enough so as to secure about one-half the increase in wages. For example, ship riveters, whose wages went up during the war from about 35 cents per hour to 70 cents, worked about two-thirds to three-fourths of the week. The wise employer sees to it that every facility is offered his employees to do work easily and effectively, and then sees that they are paid in proportion to the work accomplished. Hours of labor are not so important as the question of how tired the workers get during those hours. Men get tired by the day. Their daily hours should be such that with the facilities offered them they can surely come to work the next day fully recuperated. They live only one lifetime, so they should work so as to accomplish the maximum amount of work for that lifetime. In other words, it is a mistake to ask or even allow men and women to overwork when young, since it may so shorten their working life that they may not be able to produce more than a small fraction of what they should.

Men and women left to themselves waste time in false motions, but they waste more energy in awkward motions and unnecessary handling of material. For example, in the early

stages of the war 3-inch Russian shells were contracted for to such close dimension specifications that they could only be commercially produced by grinding. In one shop they were stood on end on the floor between machines. The operator had to step to one side, pick up a shell, lift it to its place in the grinding machine, and when the operation which took only seconds to perform was done, place it on the floor at the other side, taking one or two steps to do so. In another shop, narrow benches were built from machine to machine nearly on a level with the centers, and the shells were rolled from machine to machine. Each worker had only to lift the shells an inch or so, could stand in his tracks all day long and instead of the machine standing idle nine-tenths of the time, it was actually grinding about seven-tenths of it. In other words, the second shop offered its workers the opportunity to produce seven times as much work as the first.

Men undirected will more often than not do their work in ways which produce undue and unnecessary tiredness. Much of this can be remedied by study. Not necessarily time study, nor motion study, but study to see whether the work is most easily and effectively done standing or sitting, whether changes in lighting help or hinder, and a consideration of other factors. Every gain in the ease with which work is done, every gain in handling materials by power rather than by hand, makes possible either longer hours, or greater production during short hours, or both. Either, gives us the equivalent of a larger working population without the added expense for food, housing, clothing, and transportation which is always attendant on the transfer of people from place to place.

From the purely selfish point of view of the individual employer, it would seem that obtaining these gains should be the first expedient, rather than the hiring in of more employees. Profit lies in the saving in overhead charges by reducing the ratio between total costs and labor costs. A greater profit may also be in the better feeling on the part of the workers. Wherever one may go he always finds discontent in shops that are rapidly increasing their numbers by bringing in new and awkward people, whom the old hands have to train and who must be paid the same as the experienced men, but whose early

earnings are obviously much less. The old hands cannot be blamed for jealousy. It is only human nature to resent another's having an unearned income and to resent being asked to teach as well as earn. Hence the smaller number of new people have to be brought into a shop the better the feeling and the greater the production per dollar of payroll, even though the actual payroll, through overtime and high wages, may be quite large.

If all these efforts to do away with the need of labor do not provide the necessary employees, the most elastic part of the working population, the women, should be appealed to. During the war many women were drawn into productive work by the call of patriotism, many by money, and probably many more through just plain curiosity. They will go out of industry through the reverse process. First because the incentive of patriotism and the need for their work appears to pass; second because their curiosity has been satisfied, and last, if and when the money incentive is withdrawn. Many however, will be reluctant to give up the independence which they have acquired. In spite of all that has been said about the place of women in the home, and the need of the home in our social life, women have had the short, hard end of it. The saying that "Woman's work is never done" is only too true. There seems to be too much work in the home or too little. The wives of well-to-do men find life a burden because social ties, so strong that they cannot avoid them, take up all their time without entertaining them or proving of any profit. The wives of wage earners are given over to housekeeping, the rearing of children, and soothing a more or less tired and discouraged husband. Now, for the first time in history women have been accepted as wage earners, have been able to earn living wages by manual as well as mental effort. They know that they can make a better living than the average husband can offer them as their share of his earnings.

Women will probably be for some time our greatest elastic labor force. Men must work, for they can hardly live on their wives or female relatives. Women have for so many centuries either lived on their husbands and male relatives, or else been virtually their slaves, that they accept it as a natural condition.

The new idea of being wage earners and producers is to them an abnormal one, no matter how desirable. Women accept working conditions as they may be in shops with less complaint than men. They have accepted men "for better or for worse" through all the centuries and they very naturally, having so often realized the worst, expect to continue to receive it to some extent.

During the transition stage in which women find themselves, they will doubtless be less dependable than they have been or will be later, but they seem to be the one logical and numerous source of supply for the present. Possibly it may happen that when they again become settled in their own minds, business will have found some way to eliminate the elasticity which seems inseparable from our present methods.

To sum up the situation: We have had a shortage of labor so long that the memory of bread-lines and unemployment commissions is very dim, but we are just as likely to have them now as we were to see prosperity then. But for now, what are the legitimate ways to draw men and women to the employment offices of industry? We have tried high wages and we have tried short hours. Neither method does any good because each only tends to form expensive habits, which cannot be realized because they also produce high-living costs. The shops which have maintained high daily attendance and low labor turnover through the war are the concerns which have followed the labor market rather than led it, and who have offered their employees decent working conditions and the facilities for earning large wages. They have found it possible, by the investment of relatively small amounts of capital, to employ the types of labor that do exist, and to keep the work flowing to them as rapidly as they can use it. They have found their actual cost per dollar of production much more stable than the cost of living. In other words, they have placed their men in a position to earn as much more as they needed to cover that high cost.

## CHAPTER XI

### SELECTING AND PLACING WORKERS

**I**F a supply of labor can be assured of such a kind and volume so that some choice is possible, and the men themselves be assured of equal opportunity to secure the kind of work to which they are adapted, the next problem is to place them in their best niches with the least total cost to the community and, incidentally, to the individual employer.

Many plans for predicting employers' capabilities have been advanced. We have had psychological and physiological tests which have been industriously promoted, and which have each had some following. No one thing that is before us could so greatly add to the profits of business as the proper vocational guidance of men, and nothing else has more advantageous possibilities for the employees. It would seem from this viewpoint that any method of selection which proved even moderately reliable would receive immediate recognition. None has however, from which fact we may safely conclude that such a system is yet to be found. But there are a few things which help to make broad divisions; for example, all employees may be divided into those who work solely with their muscles and those who use their heads to help their hands. The first class is really very small. They are subnormal people, defectives, who are not dangerous to the community except as they propagate their kind. They are incapable of more than the most elementary and simple reasoning and they exist by intuition and habit.

All the rest of mankind is capable of being taught something. They are capable of at least minor success in some useful work. Some of the limitations which we have thought positive are beginning to fade away. An ear for music, for-



merly thought to be a birthright, can be cultivated. The voice can be cultivated. A few are colorblind, but nearly every one can learn something of colors. A few are naturally mechanically inclined, but since the advent of the automobile many more have developed mechanical tastes and ability. We begin to wonder if anything is impossible to the normal mind.

If this is so why, then, have we so many industrial misfits? Why so much inefficiency? The answer is simple. We do not teach and we do not supervise. One principle only is necessary to determine whether a worker is rightly placed. Does he enjoy his work? A man may enjoy his work if he likes the work for what it will bring him in comforts and enjoyment outside, but he cannot continue to enjoy it year after year unless his heart is in it, and he can see that he is accomplishing something worth while. Whether he will enjoy doing a given piece of work depends on whether he knows how to do it, and whether the man who supervises his work enthuses him with the need and value of it. Men go from job to job, trying to find a place where they can work in comfort and harmony and have a sufficient income to live like their fellows. The least of these in the long run is money. The greatest is harmony, by which the author means not merely lack of friction, but appreciation. If employers could only understand that appreciation is the best agent for vocational guidance they would cease finding fault with men whose conscientious efforts need only to be better direction.

A certain school of educators maintains that what a man learns in one vocation does not carry over into another. They believe that a boy brought up in a machine shop will have to learn the carpenter's trade from the beginning, and that it will take him just as long to do it as though he had never worked at any trade. This is likely so far as the technical details peculiar to the first trade are concerned, but fundamental principles are the same in all trades and those a man can take with him wherever he goes. At the best, however, we have to admit that there is a tremendous loss of time spent in learning the purely technical details of trades and professions. Not many people can be found, especially among those who are successful, who have not spent years of their lives learning things for

which they have had no use during the time of their greatest success and prosperity.

Experience, however, is leading some to think that the problem of vocational guidance is not so much a function of the man himself as of the environment in which he is placed, the personality of the people who share in his training, and the personality of the men with whom he works. In other words, there is a growing feeling that the right kind of a teacher and the right kind of a supervisor can enthuse, encourage, and make a man out of almost any worker of intelligence along any line of useful endeavor.

If this is so, why have we, all of us, fallen down so obviously in trying to do this very thing? We have made no scientific selections. We have tried to run our shops with what is practically "run of the mine" material, and while we have kept the shops running we have done it at a tremendous cost. There are two answers: first, we have not encouraged capable men to become teachers in any branch of our training program; second, we have not progressed in our training of foremen, or rather we have not yet begun to train them at all.

We have some most excellent teachers and we have some most excellent foremen, but neither profession pays enough so that it attracts men whose family ties demand that they earn substantial salaries. The average college professor is paid less than a machinist, and many a foreman has known that the majority of the men under him carried home on payday as much or more money than he.

It is more important that all this should be changed than it is that men should be measured psychologically, phrenologically, or by any other long-named science. It should be possible for a boy to get enough of an insight into various occupations which are open to him, so that he will know what he likes, and then it should be possible for him to rather gradually specialize in that direction, first having a thorough foundation in general principles. Our public schools are at fault in that they lose sight of their opportunity to teach many things at once. Their textbooks of mathematics employ problems which have no application in life whatever, where they might at the same time they are teaching mathematics, teach busi-

ness practices and the fundamentals of science. Physics is taught without realizing that its only excuse is in its applications. So we might go through the whole list of studies which are so closely intertwined in life that we can hardly separate them, but which professional educators have dissected and killed at one stroke.

Of all places in life where science is needed the job of foreman has been the least affected. To-day's foreman is last year's foreman one year nearer old age. The new blood which has been brought into our shops has made some progress because things had to be rushed so fast that the older men did not have time to fill them with the prejudices which have filled the craft for generations. The great majority exercise only authority. Take away from them the right to "fire men" out of hand and they are lost to find something to do. The tendency not to progress has made it necessary to supplement their efforts with the functional foremen and other people who add to the overhead charges without increasing production over that which is possible without them. The problem of employment then consists of three parts, selection, training, and supervision, none of which is as yet reduced to anything like a satisfactory basis.

Selection can only be done along broad lines. Any one who claims to be able to distinguish between men fitted by nature to be plumbers and those fitted for steam fitting, or between carpenters and cabinet makers, is probably mistaken. Any employment manager who keeps records of the industrial history of the men who come to him realizes that men do work with some degree of success at a number of very diversified trades. The variety is so great that no law can be discovered by which one can tell what trades lead to what others. This only goes to convince us that most men can be trained about equally well for a number of different callings. This is more pronounced as we go into the ranks of technical graduates. There we find men graduated as chemists who are now working as mill engineers, and civil engineers in charge of manufacturing plants.

There are a few characteristics which determine to some extent how much one may safely spend for training a given

man. If he has constantly roved about, unless he has taken a step ahead at most of the jobs, he is likely to move on with as little thought, to be carried away with the greenness of the grass in the next field. There is always, however, the chance that he may stop moving at the next job. When a man claims to have constantly been the victim of unfair tactics he may be wrong and may have a vivid imagination. On the other hand he ought not to be condemned without inquiry, as it is perfectly possible for a firm to misjudge a worker and lay things to him with which he had nothing to do.

Tactfulness is something which may grow with maturity and which may also decrease as man passes his zenith. Tact is not needed in every job. Some require a thick-skinned man who is utterly oblivious that he has offended, because that is the only kind who can stand offensive speech from the other fellow. It is a quality which reflects the management, however, so a man should not be judged lacking in tact unless he has worked under the influence of a tactful man.

The qualities which affect the rank and file and without which workmen are unsatisfactory, no matter how much they may produce, are loyalty, coöperative spirit, and willingness to work. With a shop full of loyal, coöperating, intelligently working men anything can be accomplished. It is usually possible to make a shrewd guess as to these qualities in a short conversation. If a man claims to have been overworked in the last few places where he has worked, to have been given more than his share to do, and would not go back to work for any of his previous employers, there is serious danger that he will not work faithfully for the new concern nor will he work with others, and he will probably knock the concern for which he is working. Almost every kind of blunder and unintentional error can be forgiven the faithful man who goes about his work with serious intent. The man who conceives that the world owes him a living and who intends to give as little labor as possible in return for what he gets is a burden on the community and a source of discontent in the shop or office. He corresponds to the merchant or manufacturer who gives as near short weight as he dares, and misrepresents values. He tends to hurt all the rest of the people in the same business. A little

talk with a man will disclose any such tendency, if the conversation turns naturally on the reasons why he has left previous jobs. A man of that type cannot help airing his ideas.

If there is a sufficient supply of men to cover the needs for intelligent workers after eliminating the purely manual type and the men who do not intend to work, the process of selection seems at present to be limited to placing men on the kind of jobs at which they have had the most experience, or the nearest to the kind of experience which the new job requires, and then training them for that work. Of course, if a man has a deep rooted aversion to the kind of work which must be done it is not wise to induce him to take up with it by offering high wages. He soon gets used to it and puffed up with the importance which entitles him to the larger pay and demands more. If the man for whom he is to work cannot sell him the job by convincing him that it is a really good job he had best pass it up. It does not pay to sell a man a job that he does not want just because the salesman can do it, any more than it pays to sell a man a pair of shoes too tight for his comfort.

However, a man who really knows almost any trade and who is able to present his ideas clearly can convince most men that it is a good trade to learn, especially if the shop will pay wages nearly equal to full pay while he is learning it. This is because most trades are good trades, and because most men can be moderately successful barring disabilities which affect one trade more than another, in any of them. Most of the occupations can be made attractive, and in most of them a man with a disposition to be happy can be.

Happiness on the job is not necessarily governed by the job. If no one is allowed to go on a given job except those of a sunny disposition, the chances are that all will remain happy, and the job will acquire a reputation for being a good one. One grouch, however, will ruin an otherwise perfectly good job. If this grouch happens to be the foreman it may cost the firm much more than it would to pay him a pension and replace him with a man who can see the bright side of things. The old idea that so long as an employee did his work well it could make no difference to his employer what his habits were,

nor whether he was sour or not, has had its day. We are none of us so strong but that we sooner or later reflect our surroundings. A man who is not cheerful is sick, physically or mentally, and should be cured before he is allowed to communicate the disease to others.

Other elements which help to make a job a good one in the estimation of workers, are whether the sanitary surroundings are good, even temperature, not too cold in the winter, and even more important not too hot in the summer, not too heavy work in handling the materials used, only a reasonable amount of walking, little stair climbing. In other words, physical comfort and work which does not require physical exhaustion before night. Add these conditions to readiness of access to the plant from home and the cheerfulness referred to above the jobs which are offered become attractive to most men, provided they are given a reasonable amount of conscientious training before they are expected to make good.

The problem of training in itself is one of considerable magnitude, especially from a money point of view. If every shop kept accurate information as to the cost of training its workers, including wages paid and not earned, work spoiled in process, damage to machinery and tools, loss of production, etc., they would immediately quit promiscuous hiring and give to the serious consideration of some highly-paid expert in the business the task of securing a working body of men who were convinced by something more than words that it would be made worth their while to stick to the firm. When there is a labor turnover of 100 per cent or more, and that is a very creditable showing, the shop ceases to be a productive plant and turns into a very inefficient educational institution. That is, it has the aims of a manufacturing plant and the methods of a school. Where the average man stays one year or less everybody is in training all the time, the graduates go to work in some other plant where they go through this same process of training for still another job.

Finally the selecting and placing of workers involves a physical examination, but a physical examination which attempts only to eliminate men; to select the physically perfect would leave very little for the employment department to do,

for the early experience in recruiting the army indicates that physically perfect men are very few in number. Later experience shows that most physical defects can be cured, or else can be so offset by the work offered that they do not count severely. Men with weak hearts are probably not much greater risks than men who may develop them later. That is, knowledge that one has a weakness and knowledge of how to watch out for it is safer than the assumption that one is perfectly strong. The true reason for a physical examination is to make sure that men are placed where they will not be a menace to themselves or to others. Of course, those with contagious diseases should not be allowed to mingle with the crowd in or out of a shop. So long as public health authorities permit it, the shop serves itself and its other employees if it puts up the barrier. Other ailments, and just now especially the disabilities brought on by war, should not bar any man from earning a living but should make us all the more keen to find a way to place them where they may earn the maximum wages. This is in no sense charity, it is only partial payment in a very limited sense for what they have done for the world. We should not allow our sentiment for the wounded soldier or sailor to let us overlook the industrial cripple who is as much the victim of the present social order as the soldier. He is as truly sacrificed to our necessities, but not in as spectacular a way.

## CHAPTER XII

### THE UNEMPLOYED WORKMAN

**T**HE larger and more spectacular forms of unemployment, due to fluctuations in business and periodic hard times, occupy such a large part of our attention that we are very apt to overlook the daily and weekly problems attendant on the ordinary course of the flow of labor. We have seen men out of work and their families in want, and although we see the economic waste of it all, as well as the suffering, we are compelled to acknowledge that the employment departments in our shops can do little to alter the conditions. Our employment departments can, however, through the efforts of its individual members, avoid participation in the extravagances which cause hard times. This is very difficult to do, and we should not be too severe on those who find themselves unable to battle against the current of opinion of their friends and neighbors. Men, and especially women, will always demand these things which they feel essential to their status in life. In fact, most of us not only demand certain things to satisfy our pride in the community in which we live, but also to hold our very jobs, for unless we live in a certain style our employers may think that we do not appear well enough to represent them and so they will hire others. We all know that we are "riding for a fall" but sometimes we seem powerless to prevent it.

Nothing short of general education of every one will stop these periods of speculation and high living. Employment managers may "sweat blood" trying to make jobs where none exist, by cutting down hours and days of work, and by distributing the work among a larger number of men, but that is only treating symptoms and not striking at the root of the



disease. Then again a great many of our modern habits tend to remove us from the need of personal thrift as they substitute community thrift. For instance, we insure our lives instead of putting money in the bank. The lottery element in insurance appeals to us. We buy land and create public parks and live in a flat. In fact, we have many habits which we pay for in taxes, thereby letting our more fortunate neighbors "hold the bag." The old thrifty way was for every one to acquire supplies of food and clothes against a rainy day, but by so doing the interest on the money invested was lost. Just now we seem to be in a transition stage where the great profit is to the man who accumulates any of the necessities of life, corners the supply, and then profits by our needs. When that stage is past and the man who withholds necessities from the market must have a government permit to do so, we may then be free from these spasms of wealth and poverty. That, however, will likely require years of bitter experience.

The favorite kind of employment improvement just now seems to be that due to seasonal employment, but as long as there are seasons of the year there must of necessity be seasonal jobs. Years ago a man who owned a farm expected to raise enough so that he and all his family and hired men could live on it all winter. No other way occurred to him. His men worked for him all summer; why should he not be charged with their support all winter? Now the farmer lets his extra help go as soon as the rush season is over. He is still under the legal necessity of supporting his wife and children, but the moral obligation toward his help has vanished. He does not even trouble himself as to where they go or how they live. In fact, he does not even know whether they survive the winter. The same transition has taken place in nearly every seasonal occupation. It must be said, however, that the new conception represents a decreasing amount of paternalism. Under the old idea that it was the employer's duty to support his workers during periods of enforced idleness, it was also assumed that he could control the movement and dictate the way of living of these men. This was all very kindly and benevolent, but it had the effect of making the workers less independent. Certainly the man who accepts a job knowing

that it is for the season only, and who makes provision out of the returns from the job for the period in which he may be idle, is far more independent than if he curled up by the chimney to let the winter blow by. On the other hand, if he learns another vocation so that he may quickly find and begin other work, as soon as he is through with the first job, then he is worth just that much more to himself and to the community.

It is in such cases as this that the employment manager has his best opportunity to help. He can study the seasonal occupations in his vicinity and make provision to take on house painters and other outdoor workers in the fall, and in the spring the wood choppers who are just emerging from the backwoods. If his shop is running on seasonal lines he can also plan to hire men from other seasonal lines rather than get them exclusively from other and competing shops. Of course, some of these men must be given considerable training which appears wasted when after six months they disappear, but if they have been properly impressed they will be back again another year. It may seem like "carrying coals to Newcastle" to suggest teaching men additional trades or vocations when so many of them will confess to having already worked at a dozen or more, but the great trouble is that these men have not really learned any trade. Their experience in these many lines is not planned; it is accidental.

Sometimes the efforts of the employer to stabilize employment in his own shops are well meant but not effective. A manufacturer of straw hats, for example, thought it would be wise to put in a line of felt hats so as to "round out the year." The proposition was perfectly logical. The straw hat season has very definite times of beginning and ending. Felt hats are worn the rest of the year. The times of purchase are well known. And a hat is a hat. His employees for the most part were Nova Scotians who came down each fall and worked through the winter. They did not take kindly to the idea of learning the making of felt hats. They had developed a habit of spending their winters in a climate that was slightly less objectionable than their own, they made good money, but they preferred, perhaps very prosaically, to go back where their winter's saving would make them rich for

the summer, and where their labor consisted chiefly in raising a few vegetables. They had developed a philosophy of life that to them was ideal. They did not want anything better and so quite naturally they did not favor the new idea.

Such instances may be multiplied but nevertheless it is not unwise for a man to have two strings to his bow. It stabilizes employment during the season. Men who expect to leave a given job at a definite date do not usually leave it until that time. Nor do they leave one shop and go to another in the same line. Present methods of computing labor turnover, however, penalize the employment office in a shop which only expects to operate at full force a part of the year. If two shops, each employing a force for six months in the year, would consolidate, it would immediately appear that the labor turnover of the combined plant was a hundred per cent lower than the average of the two. The large problem seems to be, however, not to entirely remove seasonal occupations, but to arrange them so that the seasons will meet without too long a vacation between. Public employment agencies can, if they will, do a great deal to help this situation. Theirs is a neutral position and they should know and be able to direct men to other places where employment is likely. Many firms would be glad to start their seasons a week or two weeks earlier than they otherwise would if they could be sure of securing men before they had an opportunity for a "general good time," with its attendant loss of morale.

It should constantly be borne in mind that the reduction of labor turnover has its disadvantages in that it makes it difficult for a man to get a job. When a firm with a thousand employees finds it necessary to hire five thousand men in the course of a year to maintain its working force it cannot stop to be too particular in its selection of men, but let that labor turnover be cut down so that it requires only five hundred, which is entirely within the possibilities, and the man who is out and is looking for work has less than one-tenth the chance of finding a job than he did before. To be sure there are not so many other men looking for these jobs, but there are a great many men who are by no means first choice men, and who will thus be obliged to wait weeks in idleness.

## CHAPTER XIII

### ADVERTISING AND SCOUTING

**W**HENEVER a factory produces more goods than its customers can purchase it turns to advertising and sends out salesmen. Similarly when a shop requires more or better help than come to its doors it likewise advertises and sends out scouts. The sale of goods has been quite thoroughly reduced to known and agreed principles through long years of experience, but employment managers have yet to come to a similar understanding regarding labor, for at present the only idea seems to be to get the men, and any way is deemed right so long as it accomplishes its purpose. It is of course legitimate to advertise for men and to send out scouts to secure them, provided that by so doing no one is injured. In other words, we have a right to do as we please so long as we harm no one else, but when we do, then there must be a compromise. Employers soon recognize this within the limits of their own town, for they usually make agreements that they will not hire from each other. And yet, if these agreements were strictly adhered to it would be unjust to the employees, but since they are not it helps to steady the situation even though it may not cure it.

When such an agreement is made the employment manager naturally turns to other towns for his help, and preferably far away, so that the news of his advertising will not reach his home town. The great danger is of course that men who would otherwise be contented and happy will read into these advertisements much more than is there. They reason that if the Jones Manufacturing Company advertises for help it must be because they need help very badly and so will expect to pay higher wages to get them. Accordingly the

workmen either go and inquire the new rates and then return to see if their own concern will not give them the same, or else they go and hire out at the new rate, thereby cutting off their connections and any prospects for promotion that may have been theirs. Very often, however, these advertisements do offer exactly the opportunity which the men are seeking as not very many concerns spend money for advertising of this kind unless they are desperately in need of help.

This increase of pay, through competition which may be only local, is not healthy for either party. It puts a premium on constant shifting about and does not help the shops to maintain a constant working force. It also tends to divert the attention of workmen from their work and in a way to make speculators of them, and speculation in jobs is just as demoralizing as speculation in stocks. Any man who is convinced that he is working in a rising market and that the way to get the top price is to work a few weeks in a shop and then leave for a small raise, and do the same a second and third, and even a fourth time, has very little interest in the shops he is using as stepping stones, and by the time he has reached the top he is confronted by a falling market and nothing to show for it but disappointment. This is entirely apart from legitimate increases in pay because of a depreciation in currency, or increase in the workman's earning power, for the wise firm sees to it that such advances are made without waiting for the man to come and ask for them.

Increasing rates to attract men is very much like cutting prices to attract trade, and that is a discredited method. Accordingly we will surely find this bidding for help discredited, but we must not fail to note that it has an advantage for the employee as he thus knows the state of the labor market. Men should also be able to find out where there are vacancies without going to employment agencies, for as a matter of fact all that the private agency has to sell is inside information as to where there is need of help, and, unfortunately, it sometimes happens that the information which they do sell is not correct. It is better for a man to learn of existing vacancies directly from the company which offers the jobs than it is for him to obtain his information incorrectly

through rumors that have reached an employment agency, or through statements given out by a foreman who only judges the whole plant from his own little department. Men should certainly not be left to find jobs by chance and the employee who takes Monday morning off to go "shopping" for a job should not be any more likely to find one than the man who sticks to his job and sends a letter of application, yet the man who goes is much more likely to land the job.

If every one advertised their needs day after day and did not use display advertisements men would soon learn to depend upon advertisements and consequently neglect the private agencies. In fact, the keynote to the whole difficulty is the competition of size and display of advertisements. It is good publicity to use large advertisements but it is poor psychology. It is also poor business, for the large display advertisements which appeared during war time, and some of which are still appearing, are not so expensive but that most concerns can employ them if necessary. A six-inch advertisement is lost just as much among a number of others of the same size as a half-inch advertisement is among others of its kind. The best suggestion that can probably be made is to encourage advertising, but to limit it to the standard small type of the undisplayed advertising column, and provided every one can be persuaded to do the same, this gives every one the same chance. If advertising is generally used it will also save much loss of time by men traveling to places which require no help and being turned away without a job, when the next shop up the street may need them.

It is wise to avoid advertising rates of pay and if for no other reason than that the rates should not be fixed before the man is seen. It may be necessary, and it is unfortunately the practice in many shops, that rates of pay should be set for the job and not for the man. This of course refers to hourly or daily rates, for there are always men capable of earning wages greatly in excess of the standard rate of the community and usually these men do not apply for jobs where the rate is advertised.

Then there are men who would never know what rate to demand were it not for the advertisement, men who never

drew the advertised rate in their lives, and many of whom never even did that particular kind of work. These men for a time at least profit by the advertised rate. Above all, however, advertising the rates starts bidding. Just as soon as one shop offers a slightly higher rate for ordinary labor than a competitor, and it becomes known, some other shop will outbid it, from spite if nothing else, and then a war is on from which no one makes a permanent gain. If an understanding could be reached by which men would not be given a higher starting rate than the one they last received, and their wages were then readjusted according to their earnings after three or six months of experience, undoubtedly there would be much less stealing of help and a great deal more satisfaction. Such a plan would put it up to the man to make good, and after that if a raise were given often enough to those who do show signs of progress there should be no trouble holding them.

All advertising and all scouting should be done on the basis of the most complete publicity of opportunities and the least danger of misrepresentation. There should be no artificial barriers to prevent men changing jobs, but there should be every precaution that men do not change under a misapprehension. The idea that men who work for a concern thereby become in some way a part of the shop should not obtain, except as they are attracted to the shop and urged to stay by legitimate methods, for a shop which tries to prevent its employees getting other jobs is bound to lose out in the long run.

In this same connection there is great danger, in fact even greater than in the case of advertising, that the scout system will work injury, for when the employment department is pressed for help to the point of desperation it may throw ethics to the winds and resort to any means to get the requisite numbers. The management very likely will lay down certain principles, including an injunction against stealing help from others. The employment manager knows, however, that all the capable men have jobs in normal times and in abnormal times he is doubly sure that every one fit to do the work has a job. Therefore, if he hires any one at all he is likely to be accused of stealing and since he is to have the name of thief he thinks he might as well get whatever credit there is at-

tached to furnishing an adequate labor supply and so he prepares to steal where the stealing is easiest and there is the least danger of its being reported to his concern.

For this purpose he sends out scouts to distant points not where business is bad but rather where it is good. He instructs these scouts that they are not to hire any one who is working but only men who have left their jobs and who have decided to leave town in any event. The scout works on this highly altruistic plan about one day. Then he writes his chief a doleful letter and says there are no men to be had, but when in reply he receives a telegram saying that what is wanted is men and not letters and for him to get men or quit, he then throws whatever ethics he has to the winds and he hires men. In fact he almost shanghaies them. He makes promises he knows will not be kept, and he signs them up. He advertises that Mr. Brown or Mr. Smith will be at the Eagle Hotel on such and such a day to hire the men. He dares not let it be known for whom he is hiring for fear a telegram to the big boss would result in his being fired at once. If men are not disgruntled he makes them so. He tells them that since slave days no one has worked for such poor pay, or under such "rotten" conditions as they, and he paints for them a sort of heaven on earth, with nothing much to do except spend the heat of the day under an electric fan, occasionally feeding a machine. He even buys their tickets and ships them to his home town and the only redeeming feature of the whole performance is that some of the men get lost at every manufacturing town along the way.

This is a doleful tale but it is not overdrawn as a great many employment managers will admit when they write their autobiographies. Scouts go from one town to another and the net result is a great deal of traveling which does no good and a great deal of unrest stirred up by just plain lying. However, not all scouting is bad. It is possible to do legitimate work in this field, but it cannot be expected to produce immediate results. If the scout has principles and is not hounded out of them by insistence from home he can act as a missionary or a salesman. What he has to sell is just as legitimate as what the salesmen from his firm have to offer.



He is selling opportunity, and there is little enough real opportunity for sale. If he goes to a town and advertises truthfully, hands out circulars descriptive of his plant and his town, shows the advantages of living there, its schools, its libraries, its banks, its low cost of living (if there is such a place), opportunities for recreation, diversity of employment, etc., or in other words, if he puts forth legitimate reasons, which he can substantiate, why men should like to work for his concern and live in his city, he will get a few men, and only a few.

These few men, however, should not be given their railroad tickets. They may be promised that the fare will be refunded if they stay a month, but at the end of a month, if the conditions are a little better than the scout has painted them to be, it will be necessary to force the money on them. They will write home and get their families to come, and from that moment they become scouts themselves and there will follow a steady flow of men to the new field. It will only come, however, if the new field is really better than the old. If the shop that is sending out scouts is not a good shop, and if it is not in a progressive town, it can make no permanent gain. Their employment manager will have to steal or go without. Of course, some day misrepresenting working conditions and exchanging worthless stocks for Liberty Bonds will go out of fashion by way of the jail route, but at present we still seem to have the *Caveat emptor* sign (Let the Buyer Beware) over the doors of too many employment departments.

Such employment managers are in a peculiar position. They have duties to perform and they have above them men who insist that these duties be done ethically, but yet they impose conditions which make it impossible. Whether a man should resign from such a position and plainly tell the manager that he cannot be a party to such acts, or whether he should fight it out and hope from his humble position he may be able to reform the management is a question he must decide for himself. We can, in any event, at least admire his courage if he tries the latter.

## CHAPTER XIV

### EMPLOYMENT AGENCIES

THE idea of an employment agency is primarily based on the thought that labor is a commodity to be bought and sold at wholesale or retail and at certain fairly definite rates. An order for a hundred laborers, a dozen machinists, or ten mill hands goes through very much the same process as an order for a carload of pig iron or a thousand feet of timber. It is the intention to always be able to deliver from stock, consequently as long a waiting list is kept as possible and if the goods are not on hand the next best thing is to go out and pick them up. The employment agency is not troubled either in pocketbook or conscience about the danger of reciprocal action because they do not care whether the men stay on the job or not; in fact "floaters" are their best asset. This applies literally to private agencies, and government agencies, whether state or federal, inherit the same ideas for they largely recruit their officials from the private agencies. They also favor the "floater" not for his financial value to them, for there are no commissions, but because he counts in their annual report as twelve men placed if they can get him into a different job every month.

If the objects of agencies are thus so entirely contrary to those of employment departments, how can they be expected to coöperate? It would seem that the desire of the employment department to cut down labor turnover would operate to put out of business a large number of employment agencies, as their revenue is derived from the constant shifting of men from job to job. Such is not the case, however, for the method of the employment agency is to stir up the great mass of labor, and to see that men are discontented.

They first place a man in a job and then in a few days let him know that they understand that there is to be a change in the management and that he had better leave and get a good job, and then while on the next job they see to it that he is sorry he changed so he will come back again for another job, and so it goes. They are always sympathetic, they let him tell his whole story, and he seldom, in fact he never, "catches on" to their game.

Let us for a moment consider the functions of an agency. It is or should be a clearing house. Suppose a city of moderate size has a hundred shops located chiefly on the outskirts. It might easily take a man a month and five dollars in carfare to see every shop and sit around in the employment office long enough to find that he could not get a job. A central agency by the use of the telephone could send him to at most three places out of which he would surely land his job. Over a wider territory than one community this is even more apparent. The shifting about of men from one city to another should be a function of some agency, and should be controlled by something beside luck. Men go from place to place today with very little more to guide them than Columbus had when he started his journey. Columbus had a good excuse, but we have no excuse to offer for allowing these men to travel about with nothing to guide them but hope and a rumor. The very fact that so many do get stranded and have to go home on charity is enough to condemn society for allowing it.

The state and federal employment bureaus were created to remedy this condition. It was supposed that they would be so closely knit together that they could shift labor as rapidly and as directly as each case might demand, but there has been a great deal of criticism of the federal agencies for their alleged failure to meet the call. This criticism, however, is unfair when directed at the general principle underlying their functions. They did not have time to find out what their jobs were, nor how large they were. They had to build a great organization with almost nothing for salaries, and no time in which to make proper selections of employees from the applicants who would consider the wage amount which they offered. They drew the backbone of their organization

from private agencies because there was no other place to draw from, and thus all the evil traditions of the private agency were introduced into the system. These men could not be expected to acquire ideals over night and in many cases they simply kept on with their tricks on a larger scale than ever. These men gave the service a decidedly bad name. They were, however, being gradually eliminated when the crash came. This of course proves nothing against government employment agencies. It only indicates what should be done next time. Given an adequate leadership, suitable quarters, and money enough to hire men with high ideals, as well as ability, and there is no reason why they should not supplant private agencies. They should understand that they are to be judged by the smallness of the movement of men rather than by the bulk of their business. In other words, they must be like employment managers, always trying to work themselves out of a job.

While it is most important to find men and women to do the work, they cannot put forth their best efforts unless they are placed in quarters and under conditions that make it possible for self-respecting men and women to come to them for jobs. Too many otherwise well-informed men and women think that all workmen are slovenly, dirty, and foul-mouthed, and they seem to think that a public employment agency must have similar characteristics to attract workmen. The trouble is that they meet hundreds of workmen on the street dressed quite as well as they are and do not recognize them. Nor do they understand that such workmen, which means practically all that are skilled or semi-skilled, will not go near an agency public or private that is dirty and which appeals only to foul people. It is probably wise to provide separate offices not only for men and women but also for skilled and unskilled labor. The office for skilled help ought to look at least as well as a similar employment office in a large shop doing an equal amount of business, and the salaries should be at least as good instead of only about half or two-thirds as was the custom during war time.

Given good surroundings and adequate salaries, the next thing is ideals. High salaries make these possible but by no

means guarantee them. By ideals the author means nothing visionary or impracticable, but merely a realization that men seeking jobs are not mendicants but that they are seeking to sell something of value in the best market and are entitled to the same gentlemanly treatment that a salesman expects to receive when he offers his goods. The managers should also constantly remember that what these men have to sell is the most perishable goods that exists. Labor must be used now or never. A day or a week wasted looking for a job can never be made up. A man working a seasonal trade may be out of work a week or two weeks between seasons, if he does not have assistance in getting some other kind of work to do, and he should not, therefore, be punished for being jobless by being placed upon a "waiting list." The good of the individual and the good of the man are the same to the public agency.

The public agency can hardly place men in jobs. It can only nominate. One shop in the community may need a dozen weavers, and another a dozen machinists, and yet neither shop could safely give *carte blanche* to an agency not under its control to make contracts, even oral ones, with any dozen weavers or any dozen machinists they might have on their list. The shop can only consider the applicants in the same way as if they came to their employment office of their own volition. Moreover, there are great differences in men who rightfully style themselves weavers or machinists. A man who has spent his life weaving ribbon may be able to earn his living weaving burlap; but reverse the program and it is not so likely. If the community needs more machinists, the public employment office should know from its relations with other similar offices where there is lack of work so that men may be offered the new opportunity without disturbing the labor conditions in their home town. This method, however, is more expensive than the private agency's method of offering large inducements to men who are well placed. In this connection something should be said of the employment agencies conducted by associations of employers.

The object of these agencies while primarily selfish and self-centered is good in so far as it tends to offset the bad

practice of the private agencies. Its limitations are two in number, the distrust which workmen naturally have for it due to its backing, and its own tendency to develop black lists. Just so long as workmen feel that they are selling their services to an enemy they will feel this suspicion of any employment agency fathered by a combination of employers. At times when the employment departments of individual firms, that are considered good places to work, are crowded with applicants, the public offices will have a good representation and the employers' association offices will have almost none at all. This is so because the association office functions only when unemployment is prevalent, and when men must have jobs even if they have to beg for them.

Most men feel that it is begging for a job to go to an association office. The result is that the greatest value of these offices is in the records which they keep and the histories of workmen which are available. These histories are complete only as they are made so by reports from the individual employers of men whom they hire and let go. It is these individual reports which lead to the building up of what practically amounts to black lists. What usually occurs is that firms report not only that John Smith worked from one date to another, and that he was paid so much money and did a specific kind of work, but they also include comments which are confidential but which are available to the membership.

Then there is a class of men whose only desire for employment is in a certain limited group of concerns. They do not want their names spread broadcast as candidates for jobs and to them the association bureau offers an excellent opportunity. As a means for securing help in any great numbers for their members, however, the association bureau is not likely to be a conspicuous success. Its very form limits it to the needs of a small group of employees, and even the men whose services are valuable to a number of groups do not find it of much use. For example, if in a given city the builders of machine tools form an association and run an employment bureau, they may find that after all they employ less than half the machinists in town and applicants do not come to them for this very reason.

Social organizations also deserve a word of comment for they find jobs ostensibly for all but usually in effect only for their members and friends. Their employment bureaus are pests in many instances, the exception being the inactive ones and a very few who realize that they have no excuse for existence except as they serve a useful purpose. For the most part their activities begin and end with telephoning to influential men, usually members, and asking them to use their influence to get John Smith a job because he needs it. They may begin by calling up the employment office of this influential man's shop, but as soon as they learn that the employment department is not interested in John Smith's needs but only what he can offer, they give it up. They are therefore apt to complain at the lack of sympathy shown by the employment department and so they appeal through influence, thereby assisting Smith to take the first step toward becoming a parasite.

These association agencies, however, do have large opportunities for helping the employment situation and many times they would do so if the aversion to them were not so great. They could, if they would, act in a manner about half way between the public agencies and the employment departments by functioning as a rating bureau. The public employment office cannot possibly make selections of men based upon any more information than that given by the men themselves. They cannot, as we have said, differentiate between different grades and different specialties; they must deal in a rather broad, general way and as a result they cannot appeal very strongly to the man who has a specialty which he wants to follow.

If these societies could only learn that in their anxiety to help they only harm, they would soon desist. They may go into it for the selfish purpose of getting jobs for members, or they may do it for the patriotic one of helping the returned soldier, but in either case the result is the same, for their only means of securing jobs for their members is pull, influence, threats of reprisal, and assertions of disloyalty. The harm they do is to the man's self-respect for when he finds that he can get good jobs any time by appealing to friendship

or a pass word he thinks he has discovered something better than work and unfortunately he is more than half right. Almost every firm has dead wood in its organization drawing good pay and looking very important but whose presence there can only be accounted for on the ground that they were "wished into the organization." These men find it is easy to stay and the man with real ability who does not realize that the management wants to be praised more than it wants dividends finds his promotion choked by these tactful and diplomatic parasites.

Finally, all things considered, it seems as though public employment agencies should be encouraged because they have a large and legitimate field of action and because the only way to drive out the private agency is to offer something better. It has been clearly shown that the bureau of the trade association has a bad reputation which will require years of patient good behavior to cure; such an organization, however, has a specialized function to perform, and by coöperating with the employment departments of individual firms it can do so to the profit of all.



## CHAPTER XV

### COLLECTIVE BARGAINING

PERFECT freedom can only be brought into industry when those who wish to make their bargains for employment individually can do so, and those who wish to make them by groups can also do so. We are never able to acquire perfect freedom because that which would be entirely harmless in isolated instances cannot be tolerated where men gather together in large numbers. What we must always consider is not the greatest good to the greatest number, but the greatest total good to all. The evil results of the crude attempts at collective bargaining, which have been so much in the public eye for many years, are so evident and the good effects are so little known that we are apt to believe that it is all bad and that no good can come of it. The very fact that a man has risen from the ranks, worked his way through obstacles alone and emerged as the directing head of some great industry, is positive proof that he cannot believe in collective bargaining, for people like himself at least. He cannot of course be expected to have the same point of view as the man who finds himself submerged in such a complex social and business maelstrom that he cannot see his way out except by clinging to some one else in blind faith.

The man who must cling to some other man's coat tails has a choice of two evils. He may cling to his employer's and the latter may in a paternalistic way drag him along with him. Every day we see instances where men rise to places of considerable prominence by reflecting their superiors, but who utterly fail when they lose their grip on their leader. The other alternative is to cling to his neighbor and his neighbor's neighbor in the belief held before them constantly by our

National motto, *E Pluribus Unum*. By sheer weight of numbers and without leadership of the true kind they hope to hold their own against the selfishness of employers who should have both unity and leadership. And often, although they have advanced their cause, it has been due not so much to sheer weight of numbers as to the fact that the unity and leadership of employers has so often proved to be imaginary.

Employers who have been most bitter in their denunciation of collective bargaining have themselves encouraged it by setting up standard wages, standard hours of labor, and uniform regulations as to work. That is, in all vital matters they have established collective bargaining while still pretending that they are dealing individually. Every time a raise in wages is refused to an individual, on the ground that if one employee is advanced others will also have to be, they take one more step toward universal collective bargaining. Laziness and ignorance on the part of employers are responsible; laziness, in that it is easier to set a wage rate for a class of men than for each individual; and ignorance, in that wages have been set without a full knowledge of what was expected or required of employees. Accordingly, wages, especially piece rates, have been set in total ignorance of what men were capable of doing. Very few shops have seriously attempted to discover how long a time is actually necessary to do any one of the operations in its processes of manufacture. If a stop watch is used to time men already doing productive work, it practically proves that the management does not know what is the most important part of production.

As long, however, as employers practice this one-sided form of collective bargaining, and as long as they decline to consider individual cases, but attempt to treat all alike, just so long is there certain to be friction, because this method does not appeal to any of their employees as fair and just. Neither does it appeal to those who want their cases considered on merit; nor even to the man who wishes to be carried along by the tide, because he does not see that he, or his accepted leaders, are in any way consulted. In other words, the deal is collective, but it is a bargain only in the sense that certain conditions are offered which are to be accepted or refused as

the case may be. If the conditions are not accepted there results either a general strike, which is unfortunate for everybody, or individual strikes classified as labor turnover which are equally costly and lamentable though not so spectacular. If a concern employs a thousand men and the labor turnover is 200 per cent, it makes little difference that the same turnover did not occur through two complete strikes in that year for the same number of new men have to be broken in to take the place of those who went out either singly or *en masse*.

Experience indicates that it is very costly to actually deal with any considerable number of men on a strictly individual basis. In order to do so it is necessary to have an organization in which judgment of individuals is exercised by foremen each of whom knows only a small number of workers and who also has his own ideas as to how the men under him should be rated. In a shop with ten thousand employees there may be a hundred foremen who are thus able to have a fair acquaintance with the men under them, but the hundred foremen will inevitably have a hundred differing standards. A single workman passed from one foreman to another will have one hundred different ratings, depending not alone on the capacity of the foreman he happens to be under to determine his value, but on his value as brought out by that particular foreman.

There are superintendents who claim to know every man in a thousand-man shop, and to know just what he is worth as related to the other men, but superintendents who are really capable of doing this are so rare that it is permissible to doubt their assertions until they prove them. In any case, a shop with such a remarkable superintendent is likely to lose him at any time, and then it is faced with the certainty that it will not be able to duplicate him. An organization which is wholly a matter of personality is not an organization; it cannot go on without its individual mainspring. Even a moderate sized business cannot afford to be dependent on individuals at any point in its organization. It must literally be an organization plus a heart in order to succeed. In the face of increased size of business organizations we shall have to give up the idea that more than a small proportion of the employees can be

given entirely fair-minded individual treatment through the medium of a military organization which makes their foremen the representatives of the company.

It is almost equally difficult to maintain a purely individual relation to employees through the medium of an employment department and for very much the same reason, which is the lack of opportunity for personal contact with a large number of people which shall be intimate enough to make fair judgment of them possible. If contact is maintained through an employment department it must be chiefly through their records, and indeed it is much better for a man to be judged by his record than by the whim of some foreman who might easily reverse his own judgment. For example, if a foreman wishes to discharge a man for incompetence and there are no records, it is impossible to offset the fact that a recent occurrence looked like the act of an incompetent person; but when the records indicate that this same man has a high attendance record, that his spoiled work record is much below the average, and that he has been recommended for increases in pay several times and granted them on the score of exceptional ability, then the foreman may have to admit that he was hasty.

The greatest difficulty with records in an employment office is to get all the good marks into the record. The black marks get there automatically, but the creditable ones are easily overlooked. On the whole, however, the system by which a man is judged by his record is infinitely fairer than when he is judged by the impulse of one man, and it is especially so if a serious attempt is made to hear both sides of the case. In fact, it sometimes seems best that the employment manager is not well acquainted with everybody, for it puts him in a much better position to act judicially if it is generally known about the shop that he does not make intimate friends and confidants of everybody.

It would seem that if any firm hesitates to follow the apparent tendency toward collective bargaining it might well seriously consider dealing with individual workmen through the medium of an employment department, known to authoritatively represent the management and which preserves sufficient distance from entangling personal friendships so that

it will be accepted by the employees as fair and even-minded. There is, however, a greater and greater tendency for employers to very quietly and unostentatiously admit a leaning toward catering to the class of employees who feel the necessity of leaning on one another, or on some leader whom they may select in company with their fellow men. There are, however, very decided objections to doing this under the conditions which have surrounded much of this kind of bargaining in the past. Some of these conditions have been brought about by the employers themselves, such for example as the fighting type of leaders which the men have had and the tendency for them to bring in outside help to fight their battles for them. The fighting type of leader naturally gravitates toward places where fights are necessary to win their case. Employers have, however, so often refused to admit that there was an organization to which their employees belonged, and so often overlooked the chance to discuss matters sanely with the reasoning type of leader that it has been impossible for the latter to continue in office. Employees have also brought in outsiders as spokesmen; that is, paid professional agitators, because experience has taught them to expect that the leaders in any one shop if known to the management will be summarily dropped from the rolls. Therefore, their only safe course is to get others who have no fear of discharge to represent them.

It should also be borne in mind that the very fact that there is an organized strike in any shop is an indication of at least a desire on the part of the workmen to stay employed in that shop. In effect, they say to the management, "We like to work for you except for the things which we are demanding." When the same number of men leave of their own accord and go to work elsewhere it may easily mean that they feel that they have no use or sympathy for the firm. A quiet strike thus carried out one by one and shown only in the labor turnover may indicate a very much worse condition of affairs in the shop than an open strike.

Another way in which employers have helped to bring about conditions which they find a burden lies in their failure to offset the propaganda of the labor unions. When one of the representatives of the labor unions comes into a city and

announces a campaign the employers too often help him by announcing their determination of fighting him on every proposition before they know what it is. This makes it easy for the representative to convince the general public that the workmen are martyrs, and martyrs almost always get a majority vote. When an attempt is made to offset the arguments of the agitators it fails to reach its mark because it is too far above the heads of the class it is intended to influence, or if the speaker attempts to imitate their leader it is too obviously an imitation. If a small fraction of the thought that is put into sales campaigns was put into campaigns for holding employees through their sympathies and reasoning ability, there would be much less friction.

In almost every successful labor campaign there has been an element of justice back of labor's demands, but the greater part of the allegations and demands have been so exaggerated that it should have been possible for capable speakers to have shown the workmen that they were being unwisely led. Employers who study the situation are beginning to see that one mistake that they have made was in belittling their opponent. A labor agitator may not appear very bright, he may drink quite all the law allows, but he is foxy, and he puts on his appearance as a part of his job. It takes a keen mind and a man with a gift of talking in plain and unmistakable language to counteract his efforts. More than that, he must be able to go before workmen with clean hands. He must discover the nucleus of truth in the agitator's story and his employers must remove the real cause of the trouble before his words will have any effect.

Suppose that all cause for mutual distrust could be eliminated from the minds of all parties, would it then be wise to have universal collective bargaining? Let us see. Universal collective bargaining is something very different from bargaining with labor unions as at present organized in the United States. Now it is only possible to deal collectively with less than ten per cent of those working for wages. It is noticeable that labor organizations have never claimed that any very large percentage of workers were organizable and that they have never had in their organizations more

than one-fifth of those that they have claimed as eligible. Whether this is intentional or not, it has made it possible for the limited membership to demand and to secure wages out of all proportion to the others without unduly or noticeably increasing the cost of living for all. It was only when the war brought about an effect similar to the unionization of many more men that the increased wages which they demanded raised the cost of living to the point where we all find this problem to be ours rather than one solely between employer and employee. It is trite to say that increase in general wage rates without increased production must be felt at once in the cost of everything into which labor enters. It is also possible to greatly increase the income of a small percentage of all employees, especially those engaged in trades not related to food products, without appreciably affecting the total cost of living.

The experience of the country during the war indicates that total unionization of workers carried out without regulation would benefit no one. If wages are universally increased and production decreased there is inevitably a readjustment which is the equivalent of a depreciated currency, and not only does no one profit but we are all placed in a position in which we cannot trade with other countries where inflation is not the rule. Universal collective bargaining should mean that every employer would make his bargain for labor not with each individual who comes to his gate, but with the group of men who are already working for him. It does not mean dealing with other bodies of men working perhaps in diversified shops in other localities, or possibly not working at all. Nor does collective bargaining in its true sense mean that the men working in a given shop will ask some one outside their own number and representing interests other than their own to come in and sell their labor for them. It does mean, however, that they will collectively and through duly accredited representatives deal for all with the employer.

Organizations composed of representatives of a number of shops in the same line of work might deal with organizations of a number of employers in that same line of business. In other words, there can be only minor objections to dealing

with representatives of one's own employees provided everything is done in a trustworthy way. The practical objections are based on experiences which make employers and employees each feel distrust for the other. Whether there is any way in which this distrust can be eliminated and a new relation established is of course still an open question, but it is very certain that there will be industrial unrest until there is some way provided for both parties to come together in confidence and with good intentions toward one another.

There must also be some way provided by which the relative value of labor in different industries may be kept adjusted in an equitable way. The pre-war condition in which an all-around machinist received less pay than men in occupations which could hardly be called trades, is not fit for perpetuation under any scheme of collective bargaining. Within the easily learned occupations these discrepancies adjust themselves through the flow of men from one calling to another, but between the trades such as that of machinist or plumber, where quite a time is required for learning, there is no provision for the rapid exchange. A man does not lay down his machinist's or plumber's kit and take up riveting without giving the matter a great deal of thought. He feels a certain pride in his calling and accepts the chance to make a dollar or two a day more pay in the other vocation only with reluctance, if at all.

There is also the problem of promotion which can be solved by promoting not within the rank but from one rank to another. Such a plan is noticeable in organizations like the army or navy where every man of a given rank receives the same compensation, and rivalry for promotion is just as keen as where all men are paid different rates but called by the same name. It would simplify matters very much if it were possible to determine from a man's rating what he formerly drew for pay. For example if every third-class machinist were paid forty cents per hour (where day rate is used) the fact that he held that rating in Jones' shop would determine his pay there. His next employer's problem would then simply be to discover whether he was entitled to a promotion to second-class machinist.



There is also the satisfaction of knowing that everything is out in the open. The man who asks for an increase in pay because his wife heard that his next door neighbor got three cents an hour more working at some other shop would know at once whether or not the story were true, and his employer could assure him that if he was entitled to the rating that the other men had he also could get the same rate. So far as the employee himself is concerned it is better to have the help of a committee of his mates in passing upon the question of his rating than it is to leave the matter entirely to the whim of a foreman who has no interest in the man as an individual, and whose ideas are so often dependent on the state of his mind and health.

The most successful shops have means of their own for finding out the temper of the shop. They usually know how a given move will be looked upon by their workmen before they make it. Thus in its practical working there would probably be little difference between a successful shop which dealt with its men collectively and any other shop, except that there would be a very much better feeling among the workmen which must inevitably come with the sense that they have some part in the way the shop is being run. There is a great difference between living in a republic and a monarchy. At the present time all attempts to establish collective bargaining within a shop must be entirely experimental. There is no precedent of sufficient magnitude to make it possible to say how it will work out. It is very safe to prophesy from the political history of the country that when it is first tried in any shop there will be a flood of crazy suggestions which will have to be eliminated; and after that if the management demonstrates its intent to play fair there will be so little interest in it that the management may feel that it is useless to maintain the machinery of the organization. In this they will be mistaken, as the very fact that the machinery is there by which the employees may bring matters to the attention of the management and ask for a hearing, is a safety valve, the very presence of which will maintain peace.

## CHAPTER XVI

### REFERENCES

**H**OW much interchange of information should there be between employers? Should a man who leaves be required to give a notice? If he does not give a notice should he be punished by the next employment office he applies to by that office refusing to hire him? Shall he be required to give references, and shall his references be looked up? All these questions are in the minds of the employment manager most of the time. They are more vital than the percentage of labor turnover and yet they are not discussed and labor turnover is, all of which simply means that labor turnover is a "safe" subject and this interchange of information is not. If we are to discuss these matters frankly we must at once admit that our ideals cannot be reached until we are ideal ourselves, and we employment managers, superintendents, general managers and all, are a long way from being ideal. In all these matters we are prejudiced parties. Worse than that, we form our prejudices on very little evidence and we do it hastily.

If we were all that we ought to be it would be perfectly safe for workmen to trust us in these matters, but we cannot expect them to do so while we act as we do. For example, a certain man who was hired with a distinct understanding that his pay was to be advanced a given amount at the end of six months waited eight months, and then when he asked for his raise was told that he was not worth it and if he did not like it he could "quit." He quit, and his former superior attempted to prevent his being hired by the next company to which he applied. When such a state of affairs is possible and there is no court of review, how can we ask any one to trust us?

Similar occurrences are common. Men leave or are discharged and their foremen go to the foremen in other shops and "tip them off" that the man is not fit to be hired. There is no specified objection and nothing is written, consequently there is no redress. There probably is no formal black-list but there are many private oral understandings which have all the ill effects of a black-list. This pernicious practice is not entirely confined to men of the grade of foremen but extends to superintendents and sometimes even to the general manager. It is done by foremen whose superiors do not know it but would frown upon it if they did, and, strange to say, even superintendents and general managers who would not tolerate for a minute such practice on the part of any one under them are also guilty. Of course, every case is "different" or "special" and men who deplore lawlessness will take the law into their own hands to prevent a man's getting another job. They will do it to the injury of good men whom they want to keep, and to the injury of alleged bad men whom they want to punish. Under these circumstances, and they are not rare, we have little chance to point a finger of scorn at any one. If there is any firm that has not been guilty of one of these two acts in the past year it is indeed an exception. Nor can we afford to place credence on the statements of other firms as to men who have left or are proposing to leave.

Many men will not give notice that they are going to leave for fear that all other equally good or better jobs will be immediately closed to them. They only learn this by experience, but once they have learned it they are not likely to forget. If asked for references, they give the names of men whom they know will give them a good name. If the firm writes to former employers it knows in advance that it will get a reply that is not worth much, in fact, no more than the reply they themselves send out under similar circumstances. There is a difference between putting down statements in black and white that may fall into the hands of the employee himself and conveying the information over the telephone or at a meeting with no reporters allowed, for confidential letters are not always kept confidential. References are often shown

or read to the man himself and the writer has even known them to be given outright to the victim. It is best not to ask for them. But if they are called for it is wisest to reply only by a statement of fact guarded by some such phrase as, "Our books show that.....," "Our records are incomplete but they would seem to indicate that .....,," etc. This does not entirely ignore the request and yet it avoids the danger that the firm will get into serious trouble.

As these matters are at present we might as well admit that employers are injuring themselves by reducing the incentive to give notice of leaving; and their employees by giving vent to their indignation when it would be fairer to first investigate the man's side. It should not be thought that the writer does not appreciate the fact that a great number of employers are fair-minded and would not consciously stoop to such acts and would be shocked to know that they occur in their shops, but one foreman or one superintendent who is provoked at the action of some workman may easily give the entire shop "a black eye." A hundred honest men cannot protect themselves from being smirched by the action of the one who meets a foreman from another shop and tips him off that John Smith is leaving Foreman Jones' department and he ought not to be hired by anybody.

If our present method is bad what can be done for protection? Shall every applicant for a job be allowed to tell his story uncorroborated? That is practically what happens. John Smith can go to any shop and state that he worked for any list of concerns that he cares to mention and the list goes down on his record. If letters are sent to these previous employers it is a dead certainty that a considerable fraction of them will have no record of John Smith at all except on the payroll. There may be a record that he left for "a better job," "got more money somewhere else," or more likely just "left," but if the record does not show that he worked there it proves nothing except that a very superficial record was kept. Then again, men often work for a sub-contractor. A builder, for example, may hire his own men but the plumber appears only on the books of another contractor. All the man knows is the name of the foreman and what his wages were.

It would simplify records and make it very much better for both employers and for employees if every man carried a card indicating where he worked from date to date, what his rating was, and how much he was paid. If the record were correct it would be a help; but if the record were incomplete, or wrong in any particular, or if it gave any personal animadversions it would be worthless. Personal opinions are not facts, even though many of us think so deeply that our thoughts impress us as facts. We may have known John Smith for ten years and be willing to swear that he never drank a drop and then suddenly discover that he drank regularly, but at home. In the same way we form opinions in the shop from only half the information.

A system of open records by which every man's industrial history could be known would no doubt be a handicap to a few. There are men, however, who have had bad spots in their past records and have lived them down. Indeed, there are but few men who have not done something that they do not like to have advertised from the housetops. Our ancestors came here to get a fresh start, and most families who investigate the records of their ancestors find accounts of men that should have been hung, and often some that were.

If it were not for the great expense of "breaking in" men, it might seem that it would be best to hire men on their record as given by themselves, but employment records seem to indicate that more men were mistaken in accepting a given job than their employers were in selecting them. During the war from ten to twenty men left their jobs voluntarily to every one that was "fired." It would seem, therefore, that workmen have more cause to object to the meager information that they can get about a job before they take it than employers have to bewail the inaccuracy of the information they get about candidates for a job. On both sides it seems to be a case of "try it and see." The employee, however, is guaranteed his wages during the trial period but the employer is not guaranteed production, and usually does not get it. The workman who leaves a good job to take one that is represented to him as better has no redress if he finds he was mistaken.

The solution of the whole problem is perfectly simple but

not at all likely. It is direct, straightforward honesty of thought and action. Whenever we reach the point where we decide to tell nothing about men that we could not go into court and prove; when we are willing to state facts and let the listener form his own opinions; when we are willing to see men rise above their former selves and to help them forget that part of the past that we would like to forget with them, then we can get along without any system of records from one shop to another, and we will be much more ready to ask candidates for jobs to be equally frank with us.

There is no doubt but that notice, and liberal notice, should be given by either party to a change. Employment is a contract, and it should be a contract not broken except by mutual consent. It is just as bad for an employer to discharge or "lay off" men without notice as it is for men to leave in the same way. How long a notice should be given depends upon conditions. There is a legal fiction to which no one pays any attention, that the notice should be equal to the time between payments; if wages are paid weekly a week's notice, or if semi-monthly payments are made then the notice should be correspondingly lengthened. This, however, is hardly a fair basis. The real basis should be the facility with which either party can again place himself in as good a position. It may be that the labor market is overstocked and the employer can get a man with less trouble than the man who is leaving can get a job, or the reverse may be true. For the sake of the community as a whole no man ought to be out of a job and no job should be left unfilled. This necessitates a complete understanding between workmen and employers which can never exist if short notices prevail. It is entirely possible to imagine a tribunal before which those who are unable to agree on these matters may present their cases so as to have the benefit of disinterested opinion. The best concern to work for in the eyes of workmen, other things being equal, is one which assists their men to find another job before they leave. This is not Utopian, for it is done and done very quietly and effectively in more than one establishment of national reputation.

So far as references and the looking up of past records are concerned there are a few questions that are legitimate to

ask. For example, if a candidate states that he worked for the Jones Manufacturing Company for three years it is proper to expect that their records will be sufficiently complete, or their memories clear enough, so that they can confirm or deny his report and tell approximately what his duties were. If he were there three years and worked at a task similar to that required in the new shop he may very likely be a good man to hire, even though his last foreman condemns him as being utterly worthless. In other words, the fact that he remained three years shows either that he was a good man or else that the foreman was so stupid in not discovering his faults until the end of three years that his opinion in any matter may well be questioned.

The records of employers' associations are also used by some, and if these records are honestly and faithfully kept they should give a fairly complete industrial history of the man who remains in one community. If studied they may show that a considerable group of men have a sort of established route. First they work for A and draw good money at piece rates until they get tired; then they go to work for B where the work is easy and the pay light; then it approaches tax time or vacation or Christmas and money is needed, and so they go to work for C who maintains an average shop, but ultimately return to A again when the absolute need of replenishing their exchequer is upon them. These routes are very natural ones and can only be avoided when employers standardize their jobs in terms of mental and physical fatigue, and pay accordingly. It will also save teaching a large number of employees several vocations. These association records are often vitiated by the presence of the opinions of foremen, but so far as facts go they are valuable in that they show the trend of affairs and thus give employers a chance to study the effect of their own shortcomings rather than to rail at the supposed stealing of their competitors.

## CHAPTER XVII

### FOLLOW-UP IN THE SHOP

ONCE a man is hired he is very likely to be left to his own resources and so allowed to "sink or swim." Some foremen build and some destroy, and good employment management either gets rid of the destructive foreman or else supplies him with help not worth training by other and more competent foremen. But no matter how good the selection and distribution of men there is always a considerable number who will hide their light under a bushel, unless they are encouraged. Chief among such are the men who are "licked," the men who have lost their grip, the men who are afraid. There are also men whose shop life is a constant fear of ridicule, of fault-finding, and of expectation of discharge, and these men do not dare to do their best because of the fear that they will spoil the work. In fact, most of these troubles are the result of fear. The men are usually not fearful for themselves, but for their dependents, and so they hold their jobs long after they should, because they cannot see how their wives and children can possibly exist without the particular job which they then hold.

Follow-up in the shop is dependent upon a knowledge of the way in which each man spends his money. The young fellow who sends nothing home to his parents and who has no wife seldom fears the foremen and in general for that reason many foremen prefer the married man because he will stand bullying. Follow-up in the shop should also include an exact knowledge of each man's actual performance, his attendance, his tardiness, his production, and all his increases in pay and changes from job to job. Then, when the foreman charges him with spoiling a job or unreliability, there is the



record day by day to prove or disprove it; and it often shows not that the man has changed from the steady production of years but that the foreman has changed. When a man's records show steady production, repeated increases in pay, and steady attendance, the foreman's allegation that he "never was any good anyway" falls rather flat. Without the records, however, the man's defence is worthless against the word of the foreman.

The follow-up in the shop should not consist entirely of paper-work showing men's records, but it should be a matter of acquaintance with all his difficulties. Much of this is automatic. When the employment department takes over the hiring of help, every foreman instinctively feels at liberty to mention the shortcomings of the men hired by that department, and in this way and without any system of forms for complaints the employment department, or at least its traveling members, get a first-hand opportunity to straighten out many troubles. On the other hand the men who come in through the employment department feel that the department is responsible for everything that the shop does differently from what they imagined it would, and so they bring in their grievances long before they would ever think of saying anything to the foreman about them.

The very formation of an employment department thus establishes follow-up in the shop whether it is intended to or not, and a follow-up which cannot be neglected. This very fact also makes it quite necessary to have men of maturity of judgment and experience in the employment department, instead of the boys one is apt to find, for such men act as mediators and often reduce the complaints and counter-complaints to bare facts. Every possible kind of complaint will be made and the management will hear that Foreman Smith will not show the men what to do; that John won't do the work he is told to do; that Foreman Parker plays favorites and will not give good work to any one else; or that racial prejudice counts too much. A great many of the complaints such as these are really based on policy and can only be decided by the company itself or by its general manager. If it has been the experience of years that men of a certain nationality are

better adapted to do a certain job than others, the prejudice cannot be broken down over night. If men of other races are put on the job it will be only to do the minor tasks and they will find it unjust. Of course it is unjust, but as long as the foreman knows that he will not be discharged he will continue the practice. Such matters cannot be settled by the employment department but must go to the management, and there is no one but the employment department to see that they get there.

Many times difficulties of a more formidable nature can be settled without appeal. Workmen are apt to make nasty remarks when angered. They realize the futility of appeal so when they get to the point of desperation they "blow up" violently. That starts a flood of recrimination which can only be stopped either by the intervention of the employment department or through sheer weariness. Inasmuch as both sides are generally right in agreeing that the other side is wrong, there usually results a "cooling off" and a shaking of hands over it when the whole affair is steered by a tactful man who is not afraid of telling both parties where they made their mistakes. Every complaint should therefore be run down no matter how obvious its cause may seem to be, for there is always the chance that some new root of discontent may be discovered.

One of the most difficult tasks of the employment manager is to get at the real cause of a man's leaving, or the reason why he is out looking for another job. It has been said that language was given to man wherewith to conceal his thoughts and it seems true in the follow-up office. Some men do not want to talk at all on the score that "the least said the soonest mended." They realize that the next job may not be as good as they hope and they want to pave the way for a possible return, and so they claim that they are going to get more money when the real reason is that they think that they are not getting a square deal. The range of concealment runs clear through to the man who thinks he can get back at his foreman by making charges which he will not have to stay and substantiate, and if he therefore knows it is difficult to get his final pay without appearing in the follow-up office

where he is expected to hear the other side of the story, he is not so likely to stretch his own.

It is most important that each man's records be kept together in such a way that his full industrial history, so far as it is known, is available at once. This should include all the data which the employment department has secured, all the records of the medical department and the accident department, changes in work and pay, attendance, piece-work earnings week by week, bonuses, etc. It should also be known whether the man is engaged in any of the welfare activities such as bands, gardening, athletics, etc., and with these records any man who desires promotion, or whose foreman wants to get rid of him, can be assured that his case will be decided on facts rather than on snap judgment. A man whose work is falling off may be partly excused and partly given encouragement if it is found that there was a new arrival in his family about the time that the taxes on his house came due. He may need a helping hand more than he needs a reprimand. It is also often bothersome for a department to send to a general file room for a man's records, and yet when they do get them such records may prove to be of great value. It may be found, for example, that the man who is continually having minor accidents may be having a run of absences from the shop and it may also be discovered that he is having some quiet little drunks, or it may be discovered that he is laboring under some unusual or excessive burdens at home and that his mental state is such that he ought not to be working where a false step might jeopardize his own or others' safety. Then again, if one of the higher officers of the company becomes interested in an employee it is very much more satisfactory for him to have a complete record of the man, rather than to have to ask a dozen different people for the information.

If these records are complete there will immediately be a great demand for them from all officials who have occasion to deal with labor matters; and there will be great temptation to take off innumerable statistics (and usually very expensive ones) to satisfy men higher up in the organization. Some official may make a guess that the greatest number of absences occur in some one nationality or that certain districts of the

city show the most tardiness due to the service rendered by the trolley company, or that the proximity of saloons is what makes the labor turnover high in certain groups of men. All these questions are of interest and their answers valuable, but even with complete records it is always expensive work to undertake. The wise employment manager therefore invites the department which wants the statistics to come and get them at their own expense, merely opening the file room to them for that purpose.

This brings up another topic which is inevitable with a central file room, and that is the fact that it is impossible to keep wage rates secret. Rates can of course be kept in cypher, but some one must know the cypher and as soon as some one knows it every one usually knows it. There is, however, no more risk in the employment department than there is in the paymaster's department or the cost department. The difference is that the employment department is so much nearer the men, and so much more approachable, that men discover more than they otherwise would. In most cases, however, this is desirable, for it is much better that every one should know the truth rather than guess for guesses are sure to be partly wrong. There is no use falling back on the theory that each agreement with each man is an inviolable secret for it cannot be kept so after it has once been made. In fact, the day of secret business agreements is rapidly going, for at present there is little that is done which is not in some way the concern of a great many people.

Such being the case, it is also proper for a concern to inquire into certain habits of its employees, in other words, there should be follow-up outside the shop as well as within. Usually an employer is in an excellent position to know the effect of the man's outside life on his productive powers. If a man throws away his ability to produce by his dissipations, by too little sleep, by too much worry, or by too much fear, it shows plainly in his work, and if his employer knows what is at the bottom of the loss of productive capacity he can help to remedy it. If it is dissipation he can at least advise and admonish. If it is too little sleep he can discover whether it is caused by dancing, theaters, movies, or by overambitious

study, and then act accordingly. If it is worry he can help remove the cause; and if it is fear, usually fear of financial loss, he can help remove that also.

All this implies an intimacy of contact which is not usual. When shops were small such matters were known to the owners, now they may be known to the foreman, but the foreman can hardly be said to represent them. Nor can a poorly paid social service secretary fill the place for a "hired man" cannot represent the management. The representative of the management must be some one who is prosperous and who looks the part. He should live well but not ostentatiously. He should be known to have carried a dinner pail and earned his own living at day wages. In other words, he should not only look the part and act the part, but he must *be* the part. He need not be handsome, in fact, better not so, because some husbands are jealous and he must call at homes when husbands may be away. Abraham Lincoln and Theodore Roosevelt would have made excellent follow-up men; in fact, they were follow-up men for the whole country.

So far, perhaps all will agree, but not much further. Some say that the relation should be purely and definitely business, others that it should be social. The first send out a follow-up man when one of their employees is out to see if he is sick or drunk and his report ends the case. The second keeps full knowledge of the man's social conditions, increases in family, deaths, marriages, moving from house to house, division of expenditures, etc. The first looks at its men as number so-and-so, or more charitably it looks on them as independent thinking units entitled to independence and not needing coddling. The second group knows how to live and how to spend its money and it will not rest until it has everybody following the straight and narrow path of thrift and economy. It does not realize that what is "one man's meat is another man's poison" but prescribes the same for all.

The best path, as usual, may be found somewhere between the two. A good follow-up man soon sees enough of the seamy side of life to realize that some measure of happiness is possible for those who do not live according to the tenets of the so-called middle class. He soon learns that standards

of living are matters of habit and custom. He finds it difficult to draw the exact line between picking wild grapes by the roadside and jumping the wall to reach those around which some enterprising farmer has built a fence. To be sure, we would like to bring all our friends from foreign shores to think as we do, but they also would like to have us think their way. Our own history is such a development and change from Puritan times that we cannot possibly hold ourselves up as models to others.

## CHAPTER XVIII

### ATTENDANCE

**T**HERE are many factors which affect shop attendance and some of them can be influenced and even very largely controlled by the employment department. The principal factor is the intangible one of spirit or shop morale. This is naturally dependent upon many other factors, but it can unquestionably be maintained if the shop is a popular one, if the men working together are congenial, if the foremen treat every one alike, if the management does not hold itself too far aloof, and so on through the whole list of things which affect labor turnover and which keep men in a friendly mood.

Possibly the most active factor that affects attendance is what might be called the social side of affairs. If a congenial lot of people come to work every day on the same trolley car, or walk down the same street, it is much easier to be on time than it is to stay out or to be late, and the further such workers have to come the more regular is their attendance. It is of interest to note in this connection that such a fact is the opposite of that in the case of labor turnover, as the lowest labor turnover is among those living near the shop. The long distance traveler must catch a certain car or be very late, and consequently his entire family soon become accustomed to his regular departure.

Another very large factor is the attention which is paid by the firm to absences and tardiness. If men find that their staying out or coming in late makes no difference, and that nothing is said about it, they find it easier to repeat the act again. Most men have a certain amount of conscience about such matters and they wish to please, but if they find that no one is concerned at their absence, they simply say, "The old

place ran before I came here and I guess it will run if I stay away." A very strict foreman gets good results as the men soon find that it is easier to arrange in advance for absences than it is to go and talk with him about it afterward. If there is proper supervision by the employment department, and every man knows that he will have a chance to explain every absence and every tardiness, then there will be a decided falling off in both. This, however, depends on the keeping of good records. Most shops have some sort of daily or semi-daily reports which the foremen or timekeepers are supposed to fill out and return to the office. In shops where use is made of these records there is no trouble keeping them, but just as soon as a foreman finds that a record which he forgot to send in was not called for, he feels that he need not be particular and from then on he makes them out only when he has time.

Almost all of both absence and lateness is purely personal, only a very small percentage being entirely unavoidable. The personal absences divide themselves about equally between social and business necessities; if weddings and funerals are granted to be social, and shopping, paying bills, and cashing checks are considered business. For example, a man buys a house. He has made all his investigations Saturday afternoons and Sundays, but when it comes to the actual securing of the mortgage and the passing of the deed he must go to the bank and the courthouse when they are open and will transact business with him, for they make their hours for the convenience of the greatest numbers. To be sure, there are banks which are open evenings, but generally no one is present who can make loans. If the shop is a little out of town the simple cashing of a check also means loss of working time.

It also quite frequently happens that the man who wishes to buy fertilizer, seeds, or garden tools finds that the hardware and seed stores are closed on Saturday afternoons. All this has been brought about by laxity in the shops and the ease with which men can get away on a reasonable excuse. The shops have simply let the stores and banks impose on them by the creation of a Saturday half holiday. The stores naturally welcome the half holiday because it transfers considerable



shopping from men to women, and stores always prefer the female shopper because the male shopper goes to buy a definite article but his wife is at least tempted to stop and look. One thing, however, can be done by the shop and that is to attend to banking matters for its employees. That is, they can arrange for the cashing of checks and the deposits of money and checks in the local banks. They probably will not be asked to attend to the securing of loans, but that only comes once or twice in the lifetime of most men.

Attention to this matter of absence and lateness will raise shop attendance in some cases from 90 per cent to 95 per cent, and this increase will easily add about 5 per cent to the productive capacity of the shop without adding anything to the overhead charges so that in the long run attendance is an important factor. Many of the social absences are due to the fact that the wife has discovered that nothing happens when she makes an engagement which necessitates her husband being absent Monday morning, and so, whenever it is convenient, she arranges a visit over Sunday and plans to remain until Monday morning, and naturally she includes hubby in the invitation.

The machinery for accomplishing results is very simple. A ruled card with a line for every month, cut by vertical lines for each day in the month, and a card for every man arranged alphabetically or by number according as the daily absence reports are made by name or number. A girl to obtain the information over the telephone is also necessary, and she enters upon each man's record, as the information is received, whether the absence was for business, social, or illness, and the latenesses the same way. In case an absence runs over two days or three days, as the custom of the shop dictates, she makes a note for the outside follow-up man to investigate. If the absence is given as sickness she notifies the hospital. When the man is reported back she gets him on the phone if he can talk English and finds out his version of why he was out. If she cannot obtain a satisfactory reply in this way she notifies the inside follow-up department and they investigate and report in turn to her. These cards after a period of six months show some rather interesting facts.

They usually show first of all that almost the entire force is very constant in its attendance, and that the great bulk of the absences are by only a few people. The cards also usually show that the largest part of these absences were due to social reasons, that legitimate business took the next largest number, and that sickness kept least of all away.

The company also obtains considerable valuable information. It may find that a valuable man is staying home with a sick wife because he cannot raise the cash to hire a nurse. It is cheaper for the company to finance him than to have him stay away. Or a man may be having difficulty in holding his house, a mortgagee may be trying to collect and the man may be having a hard and futile search for money. The company may be able to put him on the track of it in a few minutes, or it may prove to him that his equity is worthless and advise him to let it go. And so it often happens that by a company taking a businesslike and at the same time friendly interest in their men's absences they may discover many things which they ought to know and in which they can be of real help. Thus the secrets, if there are any, of a high attendance record are merely to furnish an attractive place in which to work and to show an interest in the men who work there.

## CHAPTER XIX

### TRANSFERS

**T**HERE is no doubt but that the shop, the workman, and the community are best served when every man is working where he is most productive and most happy. It would also seem that this is so necessary that no one would allow selfish motives to interfere with the moving about of men from one job to another, and yet the question of transfers is one of the most difficult problems that the employment manager must solve.

Suppose, for example, there is a man in Mill A who is very efficient and Mill B is short of such men. It would seem the only sensible thing to do is to transfer the man from Mill A to Mill B. But no, the superintendent of Mill A will protest in nine cases out of ten and propose to substitute the poorest worker he has. He feels a property right and pleads that possession is nine points of the law. This man is his man and he will throw up his job if he cannot keep him. On the other hand, if by any chance the superintendent of Mill A is willing to make the transfer, the superintendent of Mill B at once "smells a rat" and will not take any of the cast-offs of Mill A. The real trouble is, of course, that neither superintendent has confidence in the management and both are so selfish that they will neither of them coöperate for the best interest of the company.

There is, however, a chance for argument on the first point. Every superintendent and every foreman ought to be a very good judge of the men in his organization and both ought to be well enough acquainted with their men so that they can judge of their fitness for their present or other jobs. Therefore, if the general manager tries to get them together they both

feel that he is stepping out of his part. On the other hand, if the employment manager asks the right to transfer men for the best interest of the company he also meets with opposition, on the ground that he is not in a position to know as much about the men or the need of men as the different department heads. If the employment manager admits the first part of this allegation he ought to throw up his job, and if he has to admit the second part it must be because he is not sufficiently in the confidence of the management to know.

As a matter of fact, in almost every case the employment manager is the only one who is acquainted with the situation and who is disinterested enough to make such a decision. If it could be generally understood that men are hired to work for a concern and not a department, but that for the time being they are assigned to different departments because it is thought that they will be most effective there, then it might be easier to make these transfers. As it is, with each foreman and head of a department standing on his dignity as a little czar enthroned there to rule without question, transfers are often impossible. If, however, the department head is not supreme, if the management controls their plant and the foremen work for the best interests of the company, transfers will then be made as a matter of course. It all depends on the relative position of foremen, managers, and employment department. It often comes back to the understanding existing between foremen and the firm when they are hired.

In many places the only restrictions on the foremen's actions are those based on his failure to produce a given amount of goods for a given cost. As long as he obtains the prescribed production he may break all the ten commandments and any man-made laws as well. In other words, the shop is turned over to subordinates to run as they please, provided the immediate returns are great enough. The general manager in such a place has supervision over the sales and accounts, but is seldom seen in the shop.

What is he to do if he makes up his mind that the conduct of the shop, where most of the money is disbursed, is part of his job as manager? He finds, first of all, that this problem of transfers is the most delicate of all the problems that con-

front the introduction of employment management. If he is of the non-resistant diplomatic type he will refuse to hear of any of the harmful practices that this lack of coöperation in the shop brings, and the employment department will consequently make no transfers. The foremen will of course "swap help" as before and in much the same way that baseball players are treated, the consideration being some favor for the foreman who takes the short end of the trade and everything except the workmen's rights and the company's interests will be well guarded.

On the other hand, if the general manager is of the type that believes the shop will stand being managed and profit by it, he will put this matter of transfers into the hands of the employment department and he will instruct them that as one of the cardinal principles of their work they are to place workmen where they can be of the most value to themselves. Also, if they find that they have placed men in the wrong places, or if the conditions change in these places, or if for any other reason the best interests of the company are served by the moving of men from one place to another, they are to consider only that best interest of the company, provided however, that nothing is to be done without the man and the foreman or any one else who may be concerned having a hearing. As a matter of fact such hearings will seldom be called as most of the alleged reasons for not transferring men come down to purely personal ones that will not stand publicity. It is not unusual for a foreman to block a proposed transfer on the ground that his department will go all to pieces if the man is taken away and then in a few days "fire" the same man and on the ground that "he never was any good anyway."

There is danger, of course, that if the right to transfer men is placed directly in the hands of the employment department that some foremen will resign, but it is not at all likely that such will be the case for very few foremen like to even think that they will have to go back to the bench or to a machine in another shop and so work their way up again. Jobs as foremen are usually obtained either by promotion or by solicitation on the part of another employer so that going after a

foreman's job is a rather uncertain venture. The only foremen not likely to give the employment departments handling of transfers a fair trial are those who happen to have timely offers of other jobs which in all probability they would have taken in any event.

Judging by experience in other phases of employment work foremen are very glad to have an employment department to which they can "pass the buck." When things do not come out just right it is a great relief to them to throw up their hands and say, "Just look at what your employment department sent down; how can any one make good with that gang?" Of course, they do not really mean all that they say, but it does serve to create the impression that they are not solely to blame, and this one fact, if no other, is ample proof of the necessity for placing in charge of employment work men of wide experience and acquaintance. No boy can hold the position with success, nor for that matter can any man, no matter how capable he may be, unless he has the support of the management.

## CHAPTER XX

### THE EMPLOYMENT OF THE OFFICE FORCE

OFFICE employment is receiving much less attention than shop employment for the simple reason that there is much less apparent pressure from high labor turnover. As a rule, the general manager has a better knowledge of the office force than of the shop force. He is better acquainted with its personnel for it is much easier for an office man to get a message through to the management than for a shop man to do so. Then, too, office men and women are more apt to be of a stable type, less ambitious or willing to wait longer for a good opportunity. Their vacations have a larger holding power for more changes take place between September and January in offices where vacations are given to those on the books January first than during all the other eight months of the year.

There is, however, ample opportunity for the office force to help earn dividends. For instance, there is very likely to be found in an office in which each department head does his own hiring and fixing of salaries a considerable discrepancy in the rates paid to people of apparently similar qualifications, and an equally great discrepancy in rates of wage increase. There is a good reason for this, and it lies in the difference in methods of management. One pays good rates and raises salaries as often as he can find an excuse. He gets good results if he demands them and if he so arranges his work that there is no duplication of effort. Another pays low wages and only gives increases grudgingly and only when a general exodus is in sight. He gets results by driving, for there are always men and women who are afraid to look for another job, who have little faith in their ability to sell their services, and who will

stand up and work under such tactics. The "driver" usually claims, and he honestly believes, that all people are of this class. He is borne out in his views by the fact that only that type apply to him for a job after his methods once become well known and he therefore has no chance to observe the willing and ambitious worker.

Such conditions as these present excellent opportunities for the employment manager to apply the identical principles which he does in the shop. He can prevent the heart-burning jealousies which must of necessity prevail where one group of people are plainly treated differently than another. He can at least insist on similar increase in pay and at similar intervals. He can also apply tests which will conclusively define each stenographer's ability, and the same can be done in the case of those who use various other types of machines. Entry clerks can likewise be standardized as to the difficulty of the work each can do and, if necessary, transfers from department to department made until each worker is doing the highest grade of work of which he or she is capable.

The machinery for conducting an office employment service is less cumbersome than the size of the problem might indicate. The office force of a manufacturing concern will average less than ten per cent of the total force, and the turnover will seldom be equal to even half that of the factory, so the problem is usually about one-twentieth of that in the shop, so far as mere numbers are concerned. There is, of course, usually a great deal more care expended to secure the right person for the position and the applicants are also much more anxious to make permanent connections. Usually the applicant for an office job prefers to fill out an application blank and the size of the blank seems to have a real appeal to them. It should be a sheet of paper of at least letter size and preferably ledger size. It may be desirable to transcribe the information on a card for office use, but it is better to leave the filling out of the blank in the hands of the applicant, if for no other reason than it gives a good basis for judging them. Most of them fill out the blank in rather poor fashion.

The questions which are asked may be best directed more toward determining mental ability rather than proficiency at



any one thing, because the way in which a given unit of work should be done can be taught to an intelligent person very quickly, whereas lack of mental ability may prevent the promotion and transfers which make a flexible organization. Generally speaking, office applicants are also more willing to go into details as to their past history and less inclined to say what their past earnings have been. They also feel more respect for the confidential nature of their relation to former employers and accordingly less inclined to make unfavorable statements even though they may be true. There likewise is more inclination among them to follow the line on which they have started. That is, their careers are more apt to show continuous progress, while those of shop men are apt to be full of complete changes of occupation.

Girls are, of course, the hardest to place in the position where they fit in with the office system. They will persist in playing up their sex. They make themselves very agreeable and attractive when looking for a job but afterward, when some emergency loosens their restraint, they show their true natures. For this reason some firms prefer to have a woman hire their female office employees. There is danger in this, however, as women have very little mercy for shortcomings of others of their own sex, and they are therefore apt to be so critical that they either do not secure an adequate supply or else the force has so many homely girls that the men in the office find it disagreeable. The men are also very apt to feel that the women workers are forcing them out of their jobs by being willing to work for less wages, and therefore if they do not get some recompense in the way of a good-looking office force their pessimism is likely to get the upper hand.

Then there is the problem of the "old women in trousers." They are a product of the system which denies shop men the right to promotion into the office and makes the accounting department something entirely separate and apart from the shop. We ought to find some way in which a young fellow who does well in the shop, but who is not of engineering caliber, can be promoted into the office. The avenues of promotion through the shop are daily becoming rarer because of the number and quality of engineering graduates, and

unless some opening is left through the office and sales departments there is likely to be little encouragement for men of high caliber to enter industry by that road.

There has always been a tendency to pay office people in something besides cash. They get shorter hours, vacations, and clean, quiet and comfortable quarters. They appear to the shop man to be the favorites of the organization. A shop man does not at first sight see the appeal of the privileges. He has adjusted his scale of living to a certain level. If he enters the office he sees a decrease of possibly five dollars a week in his income, and he sees that he and his whole family will also be compelled to spend much more money on clothes than they did before. He sees no cash value in the short hours and vacation, only more expense. He discovers that men who accept office positions pay heavily for the privileges which go with them and that their positions as favorites are anything but profitable from a monetary standpoint. This condition is likely to remain as it is unless there is a greater influx of red-blooded men into our offices.

With the great increase in mechanical devices such as book-keeping machines, adding machines, tabulators, etc., and the systematization which leaves routine work in the hands of routine clerks, there should be a field which will attract men of wide shop and general experience. It will, however, probably increase the labor turnover rather than decrease it. Live men will change jobs occasionally but it is better that they should rather than get in a rut. It is also better for the office to have some influx of new blood of men who can look on the office methods innocent of the fact that they "have always done it that way." The employment department's problem in the office is not so much one of reducing labor turnover as it is to adjust the petty differences which occur, and to secure employees who will give adequate returns for larger salaries than they are ordinarily paid.

Underpayment in the office is not usually underpayment for services rendered but rather small pay for services which should be rendered, and it is the fault of the employees themselves rather than the management. When a clerk could take the time to add a column of figures the third and fourth time

in hopes of getting it twice alike, there was an excuse for doing everything at the same rate, and we still retain this leisurely air in all but a few of our more progressive offices. It means, however, a constant fight if the employment department champions the cause of the men in the office who are trying to upset traditions, for tradition is very strong. If the cashier got \$200 a month ten years ago why pay him more now? He is not even present as many hours a week as he was then. To be sure, he is handling twice or three times as much money and the company is making three or four times the profit, but then why pay him more? And the only reason that he gets more salary is his friendship for some one high up or fear on the part of the concern that he will leave, and thus some one else will see all the skeletons in the company's closet.

One of the disagreeable but necessary functions of an employment department is dealing with the people who have been retained on the payroll long after they have demonstrated their incapacity for their work. There are very few offices without some of these people. They have been on the payroll so long that no one has the heart to remove them, and yet, in a way, they set the pace for the rest of the force. A pension system is the only real cure for they cost less if merely on the payroll and not taking up time and space in the office. Unfortunately there is not a great deal of opportunity for the establishment of piece rates in the office. If it could be done, however, it would make these misfits self-eliminating, as well as give the rest of the force a chance to really measure themselves and acquire the standing, financial and otherwise, that they desire. So much, outside of purely routine work, depends on good judgment and care that the piece rate system does not seem to be feasible for office work. Typists can be paid by the line with the aid of counters on their machines. Stenographers depend so much on the quality of the dictation that it hardly seems fair to make them suffer for the faults of their dictators. Everything else, however, is so difficult to measure that it is cheaper to allow inefficiency to have full sway.

It has already been pointed out that there seems to be no

reason for making the machinery of employment any different for the office than for the shop with the possible exceptions, however, of the use of a written application and a separate place for the interview. All applicants know whether they are looking for a shop job or an office job, and the entrance to the employment department for office jobs is better through the office itself. In fact, the less it has the earmarks of a regular employment office the better. It should simply be a part of the main office where applicants are sent to be interviewed.

All that has been said about "hiring" being a contract applies even more to office positions than to shop, for the tenure of office is longer and the possibilities of responsibility are greater. The applicant is more apt to approach change of job with caution but there should certainly be no attempt on the part of the employment department to be dictatorial. The contract should be the result of a meeting of minds; of the applicant, the employment manager, the man under whom he is to work and that man's immediate superiors. A harmonious organization is improbable where any one in it feels that some one has been "wished on" him. This is more likely to be a vital point in the office than in the shop, for a larger proportion of office jobs cannot be defined. The very routine jobs can of course be treated like those in the shop. A girl whose duties are well defined, who is in contact only with other girls in that department and responsible only to her immediate superiors does not need to be passed upon by any one else, but in so many cases is there contact with several departments, while definite responsibility rests with only one head, that it seems very desirable that all department heads should at least have a chance to register their opinions before the girl is hired. The ideal office would, of course, be one in which every one was hired in a subordinate position and promoted as they developed. To this should be added training; not merely the casual training which comes as the result of experience, but definite intentional training with a view always of building up character, ability, and a knowledge of the work of the office.

Such definite training may cover everything from courses in English and punctuation for copy girls, to courses in busi-

ness administration for executives; the idea being to build on whatever foundation the employee may have, rather than to insist on a single course for all.

Above all, however, the office force should be taught co-operation. It often happens that an organization is built upon a non-coöperative basis, the work being done by a few men who each do it all themselves, but when the organization outgrows the one-man stage it is in serious danger of going on the rocks for lack of coöperation on the part of those who can most profit by it. If the instructor in charge of the class in business administration can be persuaded to persistently emphasize coöperation and the management itself attends the class, as it should, a great deal of good may result, for many of these men honestly believe that they are co-operating and thus need to be shown the error of their ways.

## CHAPTER XXI

### WOMEN IN THE SHOPS

**I**N the early stages of the war we heard much about the employment of women in the shops of England and France and we saw many pictures illustrating their work, not only on light parts such as rifles but also on heavy shells and machines as well. We looked at these pictures with curiosity and then we looked at our women and said, "They can never do such work." Soon, however, we ourselves were at war and then, just as we were about to find out if our women could do such work, the armistice was signed and now we hope that we shall never know. It is true there were factories where a few women from Poland or other European countries did laboring work, but they for the most part had but recently arrived in this country and thus had not acquired our ways to say nothing of our ideals.

There is something distasteful to us about a woman getting dirty, no matter how honest the labor may be, and especially about her doing heavy work. In the first instance, our feelings are only sentimental. We do not want our wives and daughters to appear to work hard. We look on them as playmates and we hate to have them helpmates any longer than possible. Our second objection is based on physiological reasons. We know that a woman cannot lift as much as a man, but we must admit that her endurance is greater. However, for work within the ordinary limits of man power, a woman will tire more easily than a man, though after each is tired, the woman, if she thinks it necessary, may hold out longer than the man.

We are, however, gradually discovering that it is very expensive to hire purely manual labor of any kind and that

it pays much better to install machinery to do the work. Such machinery naturally brings more and more shop jobs within the list of those considered legitimate for woman, and in fact, excluding sentiment, there is no reason why a woman should not work at anything that is fit for a man to do; if by fit we literally mean so. Figures 6 and 7 illustrate two types of work to which women are adapted. The first shows a girl welding small parts for aeroplanes, and the second a girl operating a molding machine. At such work men and women can compete on a basis of equality, since the jobs are fit for both. Hand molding however is not suited for women, and in most places is even uneconomical for men. Welding by hand at a blacksmith's forge is equally unsuited to women, and likewise inefficient when large production is considered.

There are, of course, jobs around furnaces and kilns where men in order to live must work half or two-thirds naked, but they are not fit jobs for men and their number is growing less and less with time. The number of men who will take such jobs is also growing less and the men that we do employ are always demanding and getting higher rates. Soon, however, the point will be reached where machinery that we considered impossible a few years ago will become a necessity and some one will then invent it. There are other jobs that require work on high stagings where there are ladders to climb, but already our laws provide for hand rails and toe-boards, and in some places the laws are enforced. If, therefore, the advent of women into these jobs will make them as safe as they ought to be, we shall certainly have much for which to be thankful.

Women in the shops make it necessary to have as good toilet facilities for the men as for the women, and there is, therefore, always the complaint that if women are employed there is great expense for new plumbing. However, if facilities were what they should be, part could be assigned to the women and part to the men. Most places are ashamed to let the women see what filthy places their husbands and sons have had to use, and so they do go to the extra expense of installing new toilets which ought to be charged up as conscience money and never as the cost of employing women.

Another result of employing women in the shops is the better guarding of machinery. A man with a missing finger, if he does not tell how it happened, may get credit for being a war hero, but a girl with a finger gone or a scar across her face is handicapped infinitely more than a man with the same disability. Of course this is sentimental and all wrong for we ought to have the same feeling toward the man with the disability that we do toward the woman. At all events, it is the same conscience that makes us put in reasonably good plumbing which also makes us see the danger of machinery to women, and so to put up guards where we would not do so for men even though the law demands it. Therefore the cost of extra guards should also be charged to the conscience fund.

A similar condition of affairs usually also exists in the eating places. Men through sheer force of habit take their dinner pails and during the noon hour lie around in dirty corners and under cars, dropping their food on unfinished work and leaving the crumbs and crusts and cores, all without comment, because it is the custom. When women are employed, however, they must have a clean, bright, airy place to eat and it is expensive to install such places. To be sure it pays, and so do similar eating places for men, but only occasionally do we find a shop that has imagination and faith enough to build such places for its men.

Similar changes occur in other habits which men have acquired in the shops. Swearing is eliminated or modified, and chewing tobacco decreases. Overalls are washed from time to time. In fact the woman-shop is at least more civilized. But what is the effect on the women? As it brings men up, does it also bring women down? Happily there is nothing in the records to justify such an opinion. It is true that in Europe the number of illegitimate children increased in all countries during the war, but that was very likely due to the customs and to the fact that with them marriage is an afterthought rather than a forethought. There is always a class of women who are man-crazy and who will go into shops or any other places where the chances of picking up an acquaintance seem good, but there is nothing to indicate that this number is increased by the fact that they can get into shops. In fact they



cannot get in a well-organized shop in any great numbers for they are easily "spotted." On the other hand, there is

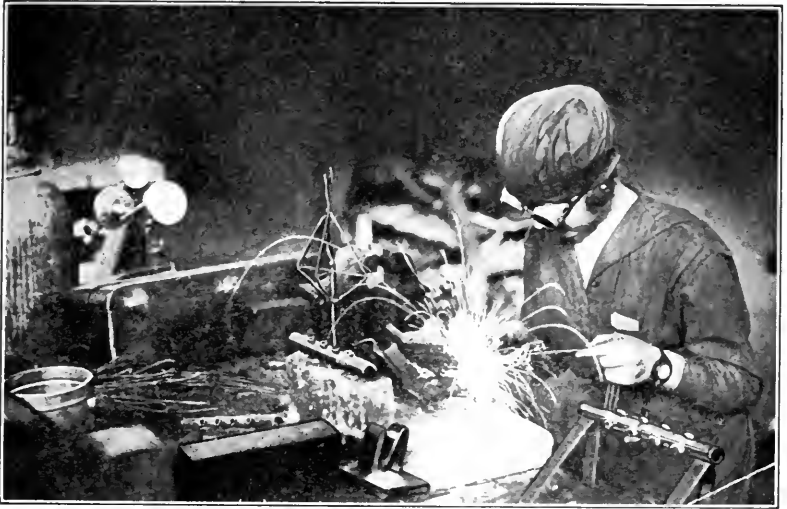


FIGURE 6. GIRL WELDING SMALL PARTS FOR AEROPLANES.

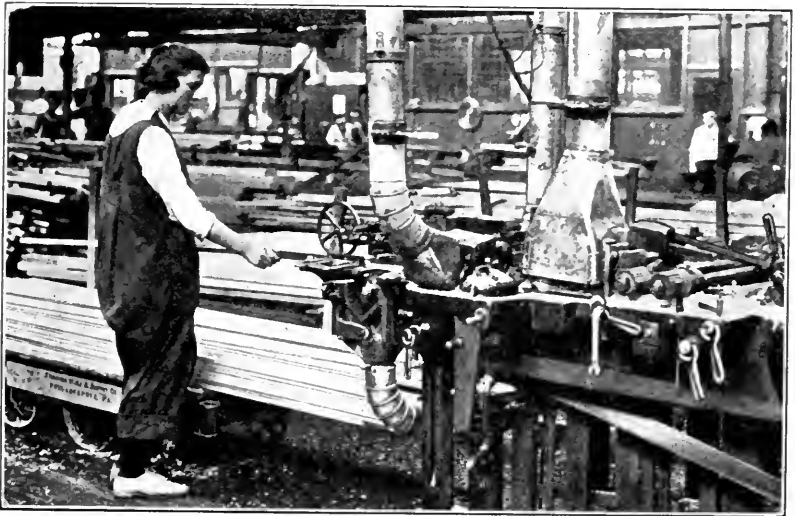


FIGURE 7. GIRL OPERATING MOLDING MACHINE.

greater danger that good girls will be unjustly given a bad name than that bad girls will get into a shop and stay there.

One of the great problems which arises in connection with

the employment of women is the selection of a suitable garb and it seems to be usually one of skirts vs. trousers. This question is one that the male sex is going to have very little to say about for women will always wear what they choose, little or much, and ours is only to look and gasp from time to time. Judging by the past, however, women are not content to look homely for any great length of time. To be sure many of their fashions have seemed unbecoming in the past but they have not lasted long. Women must attract the male sex or else be entirely false to their traditions, and we are not likely to see the traditions of centuries shattered in a few years. They may work in the shops, and undoubtedly they will for a long time, for they have found an independence they had not even dared to hope for, and for a time they will undoubtedly affect the overalls, otherwise the "womanall," but nature will most surely assert itself with something more becoming. By becoming, we ought to mean something that enhances their beauty either by adding to it or by setting it off and in some cases women may possibly wear mean, ugly clothes in the hopes that men will then look on their faces and admire them.

As a working costume for many jobs, the womanall shown in Figure 8 seems very suitable, but we can hardly expect any great number of young ladies to aspire to such a costume. For the greater number of jobs, 90 per cent surely, a skirt for a woman and an apron for a man seems the most appropriate, for machinery is now so universally well guarded that there is little or no danger of the apron getting caught and less of the skirt which women wear, because that does not have the loose corners of the apron. In addition to the element of safety the women want a garb that can be worn over the street costume in winter and used as a substitute in summer. This is easily accomplished by means of a dress of some khaki-like goods made along the lines of the conservation dress designed by the food administration and worn by so many women during harvest time and while they were canning vegetables, and for almost every job that women are likely to pursue in any numbers this costume has all the advantages and none of the disadvantages of the womanalls.

Another topic which always comes up is that of the sex

of the foreman. It seems natural to the masculine mind that a room filled with women workers should have a woman as a



FIGURE 8. THE "WOMANALL," A WORKING COSTUME FOR WOMEN.

foreman. This is the custom in some industries but not in many, for it seems to be a fairly well-established fact that women prefer to work under a man rather than one of their own sex. Whether this is because they expect to be able to fool him

more effectively in case of necessity or whether it is aversion to see another woman outrank them is a question. The fact remains, however, that there are many barriers between men foremen and women workers.

The next step is the appointment of a shop matron. Whether she shall be a policewoman or whether she shall be a social worker is not yet apparently settled. There are more social workers to-day than policewoman and yet the extreme social type, the woman who wants to be a mother to the workers, but who was never actually one to her own children, does not usually last. Young women especially look at shop work much the same as they look on school, as a sort of game where the object is to beat the rules. Not that the rules are wrong and oppressive, but the fact that they are rules constitutes them a challenge. The extreme motherly type never gets her eyes open. She always thinks of her "chicks" as "innocent little things" who never could break a rule. And there is no harm intended for once they demonstrate that a rule can be broken, they let it alone and try to break another, but it upsets all the calculation of a masculine foreman. He has lived all his life in the constant need of a job, and he cannot understand the philosophy of a girl whose idea of being discharged is that she will have an extra week's pay in her pocket with which she will buy candy and a book and curl up in a corner and be really happy for a day or two. Making rules for girls is something of a joke in itself. Of course there are some girls who not only support themselves but mothers and younger brothers and sisters as well, but a man can hardly inquire closely enough into their home affairs to find it out, and the girls are not apt to volunteer the information.

A matron should be a woman in whom the other women in the shop have confidence. She must not be of the "doll" type and yet she should not be so homely that the other girls will say, "If working in this shop makes women look like *that* I'll work somewhere else." She should have worked in a shop long enough to know how the women feel who work there. It will also be much better if she is a mother and preferably the mother of girls of an age such that they could work in the shop.

The matron should not be responsible to the foreman, though she should coöperate with him so far as he will allow her to do so. She should not coöperate to the extent of trying to transmit his orders and directions to the girls. If he appears to be having trouble making them understand, she might "listen in" and find out why they do not understand or if they are bluffing him. All cases of illness should come through her hands, though accident cases should not wait for her. Many of these cases are mental disturbances only and can be cured by a few minutes' rest and being let alone. A Christian Scientist would make an excellent matron if she could only realize that the laws of chemistry are just as much laws of nature as the laws of the mind. Whether there are such Christian Scientists or not the author does not know.

## CHAPTER XXII

### EMPLOYMENT OF MINORS

WHAT constitutes child labor is a variable rather than a fixed quantity. Some states, like Massachusetts, prescribe tasks which boys up to the age of twenty-one shall not be allowed to do. In a strictly legal sense child labor stops only at that age. Most of us, however, think of it in terms of fourteen or sixteen years of age. Men now fifty years old do not look on child labor with the abhorrence that seems to possess the younger generation. Most of them worked as children and worked hard, and yet they survived. They also survived much fried food, bad teeth, poor ventilation, and poor sanitation. They are the toughest of the boys and girls of their generation. The rest are dead. The present generation looks back on the child mortality of those days and thinks that the price paid for child labor was indeed high and as a consequence we are now going through a period of coddling which may possibly not produce the virile manhood which we need. Work in reasonable quantity is good for all, young and old, but what constitutes a reasonable quantity is no more easy to determine than to fix the amount of alcohol or tobacco that a person should have at different ages. What is good for one may be very harmful to another and some boys would be very much better off for some really hard labor as young as fourteen years. Others, of course, would not.

It seems to be the fashion to give these growing boys the choice of what seems to them to be two evils, go to school or work, thus making a punishment out of the two most valuable experiences a child can have. It would seem as if the transition from one to the other, to produce the best results, should be an easy one of increasing working hours and de-

creasing school, but neither shops nor schools are organized to do this, the exceptions being so few as only to prove the rule. Theoretically, education should be a process of learning to live without the aid of instruction. When a child leaves school he should be able to go on and learn anything he may wish without the aid of a school, but practically the schools drop him, or he drops the schools, half fledged and with but little knowledge of how to succeed with the world. He throws himself into a store, a shop, or an office and is "kicked" about until he has a little sense, which means that he learns that the school way and the business way do not mix any more than oil and water. He is perfectly willing to be "kicked" around for a while as otherwise the transition from short hours, many holidays, and vacations to long hours and no vacations is too sudden. He gets the equivalent vacation while waiting for a new job to turn up, somewhere, on the average, between five and seven times per year.

At present there is a struggle going on between the public schools and the employers for the control of these children. The public school authorities resent the criticism, the truth of which they cannot deny however that not quite two per cent of all their pupils complete their educational program. They want to keep the children's names on their books by any means that is possible. Employers, on the other hand, no matter how much they may say in condemnation of boys in particular, are constantly trying by hook or crook to get them into their shops, for boys form a valuable addition to any working force. They command low wages and enough of them grow up into useful positions so that on the whole they are a very profitable part of the organization. Also the fact that so large a proportion of what is taught in our schools is either useless in itself, or else is taught in such a way that it seems useless, makes many men honestly believe that it would be better if the coming generation went without the only kind of education the public schools seem willing to offer, and grew up in the atmosphere in which they are to work and live.

Aside from this question, however, we have the problem of what to do with the boys when they are in our shops. As

a rule, they are left to themselves and to illustrate what may be the result of such a practice the following may be of interest. *The American Boy*, a prominent boys' paper, has published a list of fifty reasons, as given by employers, to the discharge of their boys. These reasons might be classified under the following heads:

Dishonesty .....	13
Overzealousness .....	9
Lack of interest .....	7
Dissipation .....	3
Discourtesy .....	2
Inaccuracy .....	2
Disloyalty .....	2
Hasty decision .....	2
Drew loafers .....	1
Bull in a china shop .....	1
Jealousy .....	1
Cruelty .....	1
Lack of adaptability .....	1
Too much mother .....	1
Lack of detail .....	1
Lazy .....	1
Late .....	1
Wanderlust .....	1

In the minds of these employers, dishonesty consisted in being so to them and to their customers or clients. It was all petty, it was the kind of dishonesty that is practiced in our schools and which is winked at, and in a way it may therefore be said to be the product of schools. In our schools rules are made not in the interest of justice, but rather to make the work of the teacher easier and the boys have prided themselves on their ability to break these rules and not get caught. When they leave school they mistake the dictates of their consciences for the petticoat rules with which they formerly contended. Just so long as we tolerate the convenient tyranny that is practiced on our children in public schools we have no right to criticize too harshly their product. What we are doing in a rather inefficient way is to break these boys of their small dishonesties, but what we should do is to remove the cause.

Overzealousness was the next largest cause of trouble.



These were the boys who had been told by their fathers, mothers and teachers, in fact by everybody, that there is plenty of room at the top, and that it is the faithful boy who discovers some way to increase his employer's profits by several hundred per cent that wins out. Naturally having heard it from all sides he goes to work with this high resolve and soon he sees a chance to make improvements, and mindful of the stories he has read proceeds to do so. He gets caught in the act, and is summarily fired, and after this has happened a dozen times or more he begins to get an idea that the world does not want to be improved, so naturally he begins to settle down into the uninterested stage which takes in the next largest number of boys discharged, and which lasts many of them for life. Just how much initiative is lost by this repression no one knows. It is not as bad as it was a few generations ago, and a few more generations may find that the dreams of youth are not all to be sneered at and discarded untried. Boys do bring up the most foolish ideas, in the light of our vastly superior knowledge, but when we consider that what we have to-day our own fathers laughed at we ought to carefully consider even the wildest schemes of our sons. It does not take a man of even middle age to remember when men who played with kites and dreamed of flying were thought mildly insane, and Jules Vernes' fantastic stories of submarines were considered good fiction but not connected with fact.

Then there is the opposite extreme, the boys that have had the initiative kicked out of them, whose dreams have been ridiculed until they are afraid to say that they have any. They form 14 per cent of these cases. Some of them will swing back but more will not. The brightest boys in school seldom amount to much afterwards. They seem to blossom and die out of the race. They are usually high strung, sensitive, and not fitted by nature to buck against the world the way it is organized. It is just as foolish to throw this part of our working force away as it would be to decline to raise grape fruit because it is not all wanted by people who will come and get it. Great genius can command respect even if it is sensitive. People will pay large prices and come by thousands to hear a man play a violin. The violinist may be and usually is tem-

peramental, which means that he lives his own life and lets the world go its own way. But let the boy who is sensitive to criticism come along and he is squelched before he gets started. He might make a better accountant, or a better mechanic, than the thick-skinned chap that works next to him, but we discourage him as soon as possible and thereby throw away a force that we can ill afford to lose. Very seldom is there any sustained effort to show boys the points of interest in the work he is hired to do. Very many times there are none. He is hired to be present and to do as he is told. He does not know the meaning of the messages he carries. He is not in any sense a part of the organization. He is simply a necessary evil and is frequently reminded of the fact.

Dissipation was the cause of discharging three of these boys. Not real dissipation but such things as staying out late at night and smoking cigarettes; in fact all such things that a few people call dissipation and the rest term kid foolishness. They were not argued with, in fact most of the employers did not even wait to see if the boy would deny it.

Discourtesy, inaccuracy, and disloyalty each claimed two. Discourtesy in a boy of adolescent age is only a natural state. The fair-haired darlings that are courteous between the ages of fourteen and sixteen will probably die young. They ought not to be placed where courtesy is needed, but despite this we give them jobs as office boys, and have them show visitors to the offices of the manager and president. They cannot help being irreverent and burlesquing the waddle of the fat "party" as soon as he turns his back. They are simply on the wrong jobs. Girls do the job much better and at that age have a great deal more sense. That is, they think more in conformity to the ways of society.

Disloyalty ranks with dishonesty in its source, if not in fact. It is dishonest to accept pay from a company to which one cannot be loyal. Boys, however, are quite inclined to think that honesty to the concern means that they cannot be loyal to a superior who is trying to put something over on the management. After they get a little older they wink at such practices and get along better with their superiors and with their own consciences but only by lulling the latter to

sleep. Real disloyalty is very rare. What passes for it is usually lack of interest. Inaccuracy is the crying sin of all youth. It is not often a cause of dismissal because employers do not dare to put boys where inaccuracy counts for much. It is a fault of the public school system where a 50 or at most a 60 per cent mark passes. Think of an office where a clerk was allowed to stay if he got a half of his additions right!

The rest of the causes affected only one boy each. Of these one is "too much mother," or a tendency of the mother to ask for special privileges for her son. Her boy is too good for the work he is given to do; or he has to come home at three o'clock on Wednesday to have a music lesson. The boy who suffers from "too much mother" is to be pitied rather than blamed, and he cannot be told to resent it. There is no cure unless through the father and he probably has trouble enough of his own with a wife of that type. One boy proved to be of the type that is always breaking things; he grew so fast that his muscular control did not keep up. Another seemed to have a following of other boys who were merely loafers. They hung around the store and drove trade away. He had the faculty of making friends without the discrimination to make the right kind, and to all appearances no one took the bother to tell him differently. Another could not remember detail. One more could not keep still. He just had to move on and on. One each was lazy and tardy, a very small number considering that these two attributes are usually considered as belonging to boys.

What does all this mean to employers? It means that men have to go through the boy stage. Nature demands time in which to develop not only the body but the mind, that this development must go through certain stages or result in abnormal and one-sided development. If we want to make the best men out of our boys, and want to make the most profit out of them at the same time, we must study boy-nature. The school of hard knocks may be a good school. It is effective, to be sure, but no one would think of running a stock farm on the plan that we use to train (?) our boys in the stores and shops. We simply cannot afford to discharge a boy for

any of the reasons given above. These are symptoms that the boy is being natural or developing as is to be expected from the surroundings in which we have thrown him. The school, with its distinctly feminine environment, is the first thing in his life that needs reforming. Then we need to learn to reason with him in terms that he can understand. There are very few boys who do not want to do right. They do not understand why we do some things the way we do, and if we stop and think a moment we find it pretty hard to give any other reason than that we have always done it that way. It often seems hard to bring ourselves to treat with a boy as we would with a man of our own age, but the cases where it has been done seem to have been profitable. Just so long as a boy is treated as a boy, in the usual sense, he remains a boy. It is only when he begins to look like a man that he is treated in such a way that his self-respect is given a chance to assert itself.

## CHAPTER XXIII

### EMPLOYMENT OF CRIPPLES

THE results of the physical examinations made at the beginning of the war showed a very small percentage of perfect men, even so far as freedom from disease and deformation are concerned. In a sense every man unable to pass these severe tests is a cripple, but technically speaking, a war cripple, as defined by law, is a man whom the War Risk Insurance Bureau rates as being over ten per cent disabled for his former vocation. Even this, however, is quite contrary to the view so often held by the general public that a cripple is a man who has lost one or both legs and must beg on the street corner to secure a living. Thanks to the foresight of Congress, there will be few if any poverty stricken cripples as a result of the war, but we will still have industrial cripples to be employed and they must be profitably employed.

In the past it has too often been the habit of superintendents to offer any man who was hurt in the shop a job running an elevator, or as a watchman, or some other "dead end" job, and this arrangement would continue until there was a change in superintendents, or a spasm of economy struck the firm, by which time the man had usually become a chronic "dead-ender" and was unable to arouse himself to even ask for a man-size job. As a result of the work done in the rehabilitation of war cripples, there will however undoubtedly be a great change in the réclamation of shop cripples.

There are two fundamental ways of handling the problem of disability. The first is the European method which is based on the immutability of the trade, by which a man who was injured in such a way as to decrease his ability to earn money is supplied with artificial means; the second is the

American plan which seeks to develop the man's mental powers rather than his physical ones. Under the European method a man who had been a pattern maker and who had lost an arm would be supplied with an artificial arm for Sunday wear, and also a kind of holder into which the various tools of his trade could be inserted. He would be trained to use this artificial arm and sent back to his old work. This is probably the best possible way in Europe where families follow one trade for generations, but in this country where it is the exceptional boy who even tries his father's trade, and most men can show record of having tried several different callings, this plan is not the best. It is rather more in keeping with the customs of this country to train the injured man for some other trade, preferably one for which some one of his previous occupations form a basis, and in which that particular injury will not be a great handicap. For example, a man with one leg may have been a most excellent house carpenter, but he can no longer safely climb ladders. He can, however, be trained to become a pattern maker and given a job which will not require him to be on foot all day, or he may be taught to read architectural blue prints and thus become a draftsman or an estimator.

One of the most difficult cases to handle is that of the day laborer, who has had nothing to offer but his manual labor, the strength of his body. Very few accidents can happen to such a man without taking away all his visible assets. He has nothing to build on, not even in many cases, a knowledge of English sufficient to enable him to intelligently discuss his case. These men may be divided into two classes, one the merely ignorant, and the other those mentally lacking, classified in the army and navy into cases of *dementia præcox*, or constitutional inferiority. Many such men are really capable of earning a fair living, if under suitable conditions, and many of them did and were only made to suffer when in the course of army discipline they were obliged to obey orders without having time to think the matter over. With a drill sergeant barking at them they naturally went to pieces very soon, and of course suffered a nervous collapse and had to be surveyed out.

These men, whether their disability occurs in the service or in private life, are really suitable subjects for treatment in an institution. However, they are often able to earn a comfortable living for themselves in some of the many positions in industry where the duties to be performed are more or less of the alarm clock variety, that is they must be present and ring in an alarm if things are not going right. Industry is still so organized that there is yet need of such men, and it probably will not change materially for some time to come. There should, however, be saved for men of this type jobs that have the semblance of importance, as typified by a uniform and brass buttons, for although they cannot accept any real responsibility they are happy in the belief that their jobs are important.

Another difficult case to deal with is that of the man who has a strong mentality, but who quarreled with the system of formal education which prevails and leaving school went to work long before he ought for his own good. We cannot but feel a strong sympathy for him, and perhaps we are inclined to bewail the ineptitude of our public school system and let it go at that, but this does not in the least help him. It would seem as though a country which has for so many decades allowed its schools to be predicated on the needs of the two per cent of the population who desired to go to college, should at least provide the means for helping these unfortunates; but we do not do it that way. However, it is possible under the Rehabilitation Act to place these men back in the schools which they left, tell them that this is the system and that if they can stand it it will do them good, and see if they will not stick to their job better than they did before.

While this may seem much like thrusting medicine down a man's throat while he is powerless to resist, or in milder form, taking advantage of his inability to see any better way out of his difficulty than the one we offer, it is effective. These war veterans have matured a great deal because of their experiences, and their attitude toward education is vastly different from that which they previously showed when partaking of formal instruction. They have learned to accept what comes to them, and to try to find some good in it and they

consequently find much in our educational system which they can appreciate. In addition they are, for the most part, definitely headed toward some vocational goal and vocational education is just creeping out from under the wing of the general school system, and getting ready to hold up its own head. These soldiers are just in time to both profit by the industrial education movement and to help it along by demonstrating its practical value.

The same sort of training should be given to the industrial cripple. If he is well educated or well started on an education he should be given all the practical, useful education he can profitably use. It may seem as though he did not need such training, but the public interests demand that he have it. There are too few boys and young men who are mature enough to really get full value from technical training of any kind, but here among our cripples are men capable of developing brain power beyond that possessed by the younger fellows who have taken their school work as a necessary evil connected with playing on the baseball team of some well-known college.

From the American point of view this is the keynote of the whole situation: to develop brain power rather than to offer the mechanical aids which seems to be the European way. This applies not only to men capable of acquiring a college education, but also to the men in all ranks of industry, commerce, and profession. If a man has been working as a shipping clerk in a hardware store, and can no longer do so because he is lame he should be given training in bookkeeping or cost accounting and put in the main office, where in spite of his handicap his acquired knowledge of hardware will make him worth more than the office-reared clerk. If it is a case of a man who has been working in a railroad shop as a machinist, and he can "carry on" no longer because of the loss of a leg, or a wound across the back which prevents his lifting, he can be sent to a trade school, and in a comparatively short time trained to do light fine work, such as running a bench lathe or small hand fitting or assembling, for the principles of machine work are the same regardless of the size or weight of the work.



These ways of assisting disabled men seem comparatively simple, and they are usually simple when the disability is a visible one. When a foreman has a one-armed man or one with both legs made of wood, he has a constant reminder of the man's handicap, and a reminder which makes the disability seem greater than it really is. But if the man is one of those who are doubly unfortunate in that the disability is serious and yet invisible, his lot is much harder. This applies to men severely gassed during the war. These men did very nicely while they were living in camps and practically out of doors all the time, but as soon as they came home, and went back to sleeping indoors without a vestige of ventilation, their health failed. Such men are very apt to blame the shops, when as a matter of fact it is more often the air at home, or rather the lack of it, that causes the trouble. It is possible, however, that this may have a good effect on the rest of us, as these men will have to insist on ventilation in order to keep well once they are cured again, and that will be most excellent for us, no matter if it is uncomfortable while we are getting used to it.

The first thought these men have, and the same applies to the great number of tubercular cases as well, is to get outdoors and the first job they think of is on a farm. The man who was born and raised on a farm does not think of this, but the man whose acquaintance with farm life is confined to what he has seen in the movies, or what he has seen when driving out on a Sunday in his automobile, is carried away with it, and will demand as a right that he be trained in agriculture. The experts in lung troubles, however, seem to have grown away from farm life as a cure and are insisting that location is one of the least of their problems. But they do insist on an abundance of fresh air and a proper diet to build up the patient's resisting power. Inasmuch as nearly two-thirds of the patient's life is outside the shop they are now laying more stress on his home life and surroundings and not so much to the shop, especially after the case has been arrested. By an arrested case of tuberculosis they mean, not a cure, but that nature has walled off the section of the man's lungs which is affected and that unless the wall breaks down there is no

more danger from the disease than to any other man. The wall may, however, be broken down through sickness of another type, through the effects of a spree, or by too strenuous exercise or work, especially work which involves movement of the arms and upper part of the body.

The men who are suffering from bronchitis are likewise in constant need of plenty of fresh air. This and tuberculosis are the two most prevalent disabilities which are not visible but nevertheless they have a great many victims. Such men need the watchful care of their foreman, and he also needs some one to watch over him to keep reminding him not to assign work which may break down the man's resistance and make him go all through the process of arresting the disease again. A careless workman, or a careless foreman who threatens discharge if an unreasonable order is not carried out, may easily scare a man into a relapse. There is, of course, great danger that men will discover that they can lay back on the job and pretend that they cannot do tasks which they might as well do; and if they are transferred on to piece-work there is likewise danger that these same men in their greed will overdo and acquire a real disability. Such men require the most constant watching not only by the doctors but by the employment office, which is likely to have a better perspective than the foreman who is close to the individual worker.

Everything that is being done for the returned soldier applies to the industrial cripple. It is not enough that he be given medical and surgical care, that he receive a fraction of his former pay, and that he be put on the payroll at the old rate, but he should also be placed in a position where he can command his old rate from any employer, even if it is necessary to spend considerable time and money in so doing. He could well afford to pay for this training himself out of the increased earnings which he will get, but he has not the capital to finance it. In all probability the state and federal governments will step in and assist the employer to finance this period of training for a new job. It is their duty and it is to be hoped they will recognize it as such and act accordingly.

## CHAPTER XXIV

### SOCIAL MISFITS

**T**HERE is a vastly different attitude from that of a few years ago toward certain people who do not harmonize with the social world. To-day a man who is convicted of some minor crime or misdemeanor is quite generally let off very easily until he shows signs of developing a law-breaking habit, and even then on his release he is given every opportunity to enter industry, for to-day the curative or reformatory quality of work, under comfortable and pleasant conditions, is becoming well recognized. Nowadays, when a man leaves prison he comes out with the backing of real friends who want to see him make good. There are not the identifying marks of incarceration that one would suspect from reading current literature. He comes out and goes into employment unless he wishes it otherwise. He goes into a shop where his record is not known to any one outside the employment department and even then to only a very few in that department. No one in the shop will give him away in a fit of anger unless it is some chance acquaintance who knows that he was "put away." He literally starts afresh.

Should the employment department take on these men if they present themselves? It is a question. They most certainly should not without the consent of the management, but with the approval of the management a small number of men well scattered through the shops may safely be taken on, especially if it is known that they are not acquainted with each other. The great danger to these men is temptation. They may have been under tremendous and peculiar stress when they yielded to temptation, and it must always be remembered that they have demonstrated their breaking point. They

have shown a limit. No man should be tempted to anywhere near the breaking point any more than a steel beam should be loaded to its limit of elasticity. For this reason special care should be taken that men who have thus suffered should not be further punished by the shop in which they are placed. They should be paid enough so that their minds are not concerned with financial problems. They should be made to realize that the people who know of their past are anxious to see them live it down. There should be an abundance of physical activity about their work so as to keep their minds off themselves, and they should not live in the slums but somewhere where they will associate with self-respecting people whose example they can follow. In other words, they should be in the environment that every man needs, not merely in a special environment of their own. It should also be kept in mind that our judicial system is not without flaws, and the man may be innocent of the crime for which he was convicted.

In addition to these social misfits there are the innocent mental cases, who form in some degree a part of the force of every shop. Discussion of mental cases is to some extent a delicate matter for each of us must judge by our own standards, and of those we are none too sure. We always should remember the saying of the old Quaker who told his wife. "Every one is queer except thee and me, and thou art a *little* queer." The layman who attempts to discuss this subject with an expert in psychopathy, or to read his books, finds himself confused by a series of long words some of which are meant to convey fine distinctions but more to cover up their lack of exact knowledge. Stripped of all verbosity it appears that every one, according to one writer, who does not learn by experience is mentally unbalanced. As a people, we are inclined to be too severe in our judgments in this respect. Most of our great inventors have been classed as mentally unbalanced. In the minds of the public Langley died mildly insane, but now we know that he was simply wiser than the men of his generation.

We accordingly modify our definition so as to cover only those who try the same things and under the same conditions time after time, and who refuse to try anything except the

time honored methods. In the latter class we must place the men with obsessions which they cannot explain but on which they pin their faith. These men may fear to walk under a ladder or are unwilling to hire men with red hair or even go so far as to condemning all men of one nationality, without knowing any of them. There are also people who feel bodily pains where no apparent physical cause for them can be found. We are of late becoming more careful of this class because physicians are discovering sources of pain that they did not formerly recognize and Christian Scientists are finding ways to get people away from the belief of imaginary pain. We must, therefore, conclude that mental defectives are only those who either have not the normal ability to reason, or who do not exercise that power. Of course some are sick and can be cured by physical means. Others can be cured by suggestion, that is by convincing them that they can reason, and getting them to have faith in the person guiding them.

It is not profitable to place such men where they are unhappy, and where they are subject to unnecessary irritations. This is of course also true of other people, but those who do pioneer work must expect to meet trying conditions into which mental cases should not be allowed to venture. A great many mild cases were intensely aggravated in the army and navy by the sudden change from an easy-going life to one in which commands were barked out and no appreciable interval of time allowed for the comprehension of orders; very necessary from a military point of view and very bad from the point of view of the troubled mind. Time alone will bring these men back to their old state. A nagging foreman has the same effect as a barking sergeant. Such a man should not be allowed to have any of these cases under him. He will only make them worse and throw away their possible productive capacity. If we are to get the utmost production, every one must work who is capable of work and the mere fact that a man is slow of comprehension, that he sticks in ruts, and that he seems stubborn about changing cannot be allowed to stand in the way of his efforts to help increase that production.

In the shop this mental deficiency shows itself in an inability to think quickly or coöperate and in stubbornness. The

first of these can be overcome by putting those so afflicted on routine work and taking plenty of time to break them in on the job. Some can do real complex work, after a long period of experience, if they only have to take one step at a time. This will apply by far to the greatest number, but there are always some who cannot endure routine work, who must have variety, and whose trouble comes with too quick thinking rather than too slow. These men need to have isolated jobs where they do not have other people under them and where no great degree of team work is required. Such men do well as repair men, adjusters, time clerks, or painters, in fact in any jobs which do not call for leadership, or the necessity for following. For example, a man who had demonstrated his inability to get along with others was made a designer of the machines on which he had formerly worked and with great success, and another was made an investigator where the very qualities which formerly had made him seem queer then made him successful.

Stubbornness may come from either group, from the first because of sheer inability to comprehend new ways, or from the other through belief that some other way is better, but lacking the power to express that belief in convincing terms. In this latter class must be placed all men who "buck the crowd." All men who are ahead of their times are also usually classed with them, but only until the time comes when they are proved to have been right. We should, therefore, be very careful in making up the classification. Usually we consider all conservatives as being intensely sane and they in turn classify all radicals as at least mildly insane. It is equally fair for the latter to think the same of the conservative who is so slow to change with the times that he holds back the progress of the shop. For example, the executive who will not accept modern machinery and methods of production is just as much of a mental case as is the workman who slows up production by being unable to comprehend new methods. Similarly the designer who insists on giving his firm designs for which the market will not be ready for ten years is just as bad as the man who demanded ten years ago what are now accepted as normal working conditions in the shop.

To discover such men in the shop and to suggest their treatment when found is a very delicate one for the employment manager. The easiest way of course is to discharge them, but the better way is to study each case and then seek out the foreman who had a sense of fair play and a fatherly interest in his men and place these men with him. This is one of the few instances where paternalism is needed and is justified. These people are not wholly grown up and most of them, the sluggish type in any event, prefer paternal treatment and gravitate ultimately to a place where they receive it.

Finally, there are the men who are ahead of their time, and whose ability to coöperate is limited by their knowledge that the people with whom they might coöperate are behind the times. Such men are valuable and many a firm has regretted in after years that they permitted men of this type to leave them. It is well to isolate them, however, and to tolerate them for the good they do.

## CHAPTER XXV

### SAFETY ENGINEERING AS RELATED TO EMPLOYMENT

**M**EN work, not only for money, but to avoid loss. If a man receives a thousand dollars a year, and then meets with an accident which costs him in medical attention and loss of pay another thousand, he has really worked a year for nothing, even if he comes out of the accident as well as ever. It is well known that many more accidents occur through the carelessness of workers than through the neglect of employers to provide proper safeguards. Here, therefore, are two separate and yet intertwined problems. One that of persuading employers not only to provide safety devices but to enforce safe practices; the other that of getting employees to accept those safe practices and abide by them.

The first part of the problem, that of securing mechanical safeguards, is usually the simplest. If the company has been making money it is easy to get appropriations for this purpose as it is an evidence of good faith, for it practically says to the workmen, "We are backing this Safety First matter with our money, so you know we believe in it." The difficulty is to find out what safety practices are of value and then to put them into effect. It is easy to obtain mechanical safety devices because all we need to do is to write an order to the engineering department to do the job. Unfortunately there is no department that has to furnish and enforce safe practices, for the safety engineering department as usually constituted seldom has a chance to really enforce its rulings. It usually finds a condescending compliance which is easier than opposition.

Safe practices can usually only be arrived at by experi-



ment. The safe practice must not impede production. If it accelerates it the safety engineer is a good man. It is only possible to try out new methods of doing work behind closed doors for if it became known that the safety engineer had tried a method which slowed the work down 50 per cent it would be next to impossible for him to put over the new scheme, even though it helped the piece-workers to add 50 per cent to their earnings. Safety engineering ought to be linked up closely with the engineering and the production departments. If it is not it cannot give the aid that it should and it must accordingly work without a knowledge of what is going on around it.

A good safety man should first of all be a good engineer. He should realize that the shop must maintain production. He should be in touch with the employment department so that he knows what kind of men are being taken on, so that he can tighten up on his safety practices if the quality goes down and let up on them when it is safe to do so. It should always be borne in mind that accidents are proportionate to the lack of intelligence of the men employed. Much of what seems like carelessness is really due to ignorance, and ignorance in its turn may be due to lack of understanding of English or to slowness in getting used to new ways of doing the work.

In times past when every one in the shop worked his way up and men took an interest in their fellow workers and warned them of dangers, there was little need of safeguards. Back gears did not need to be covered because every one knew which were the danger points and kept away from them, and the same was true of the buzz saw, the jointer, and the shaper. Accidents were then few and far between and if the same men were available to-day our shops would have no need of guards. Now workmen of a very much lower caliber are doing work which we formerly thought demanded skill acquired through long years of practice. These men are good imitators but for the most part poor mechanics. They are also very apt to imitate the careless things they see done, for they do not realize the possibility of danger. They see a man let his fingers touch a running gear on the side that is running away from the danger point and so they let their fingers touch

one on the side that is running toward danger with consequent loss of fingers or perhaps a hand.

The other problem, that of securing the coöperation of men who are normally careless, is a matter of education. There is abundant literature to be had, moving picture films that can be shown, and examples of the serious consequences of carelessness that can be and must be continually brought to the attention of the men. Very few people who constantly take chances themselves realize that bad accidents occur to many who do the same things. Take the simple matter of getting on and off a street car when in motion. It is perfectly safe to do this under certain conditions, but if the pavement is slippery, or the light is poor, or the hand rail on the car is loose, or is not where it was expected, it is dangerous. It is also very dangerous to the novice who thinks he must imitate a more experienced person or to people of the non-athletic type who are sometimes in just as much of a hurry as any one else. For the sake of the example, those of us who can swing on and off a street car should stop, even though we feel no danger in it ourselves. Not all of us are sensible enough for that, so the street car companies, aided and abetted by the state legislatures, have made it necessary for us to be boxed into the cars and not allowed to get on or off until after the car stops.

The organization of a safety engineering department may take on two different aspects, or it may be a combination of the two. These may be called the professional and the amateur. In the first the planning of safety work, and its execution is in the hands of men whose sole duties are to take care of that work. They accept full responsibility for it so far as the limitations of their authority will allow, and do not as a rule require coöperation beyond obedience to their rules and regulations. Whatever of an educational nature is done is done under their supervision. The other plan involves a shop safety committee made up of men from different departments. These men are foremen and workmen, and their safety work is purely a side line, usually an interesting one but a side issue nevertheless which they have to lay aside whenever their real work is pressing. The result of this is that when business is quiet, and the men in the shop are well acquainted

with their work, there is very good and efficient safety work done, but when the work is rushing they are busy with production and the safety work suffers just when it is most needed.

There are, however, real merits to the amateur safety committee, especially in parts of the country where membership on committees, and especially those which entitle the member to a badge, are valued. If the membership is rotated and if the committee is split up into a number of sub-committees with jurisdiction over small floor areas so that in a committee of three one has had at least one month's experience and another two months', while the third is a new member, there soon is a quite considerable body of "alumni" of the safety committee all of which body can wear a safety insignia which may soon come to be valued. If the members of this committee are given some little extra authority such as reprimanding any one seen indulging in unsafe practices, there is enough responsibility and authority to appeal to a very great number of men and make them show an interest which can only have a good effect on the morale of the whole organization. In a very mild way there is also a certain democratization which comes about through the feeling that here is a way in which a man, without even becoming a foreman, does become an active, potent part of the organization.

The best in each of these methods should be sought out and employed. The professional plan provides a responsible body which knows that it will be held accountable for failure to provide safeguards, and to establish and promote their use and the use of safe methods of doing work. It can only avoid blame by proving that they made recommendation to the Board of Directors which if adopted would have made the accident impossible. The amateur plan helps to form a considerable body of men who have an interest in safety matters and who in a way police the plant, and help turn public opinion in favor of the safety engineering department.

There is always need of good feeling among workmen toward the safety department because it is quite the rule for foremen to belittle its work. This is often the expression of a certain amount of jealousy. They feel that the safety engineer takes over a little of their prerogative and lessens in

some small way their own job. It is probably true that the further the foreman is from being a czar in his department the less awe he creates among his subordinates. This does not mean that they respect him the less, but it does mean that he does not feel his own importance so much. If the foremen can be given some part in the safety work so that their subordinates feel that the safety engineer is not in some way dominating the foreman, it adds to the latter's pride and makes him imagine he is being held in higher esteem by them than he otherwise would be.

Under any system whatever the arrangement by which safe practices are put in effect, or whatever organization carries them out and installs safety devices, it is necessary that it have authority to stop machinery which is left unguarded and prevent its use during the time it is unguarded. This authority will for the time being stop production and will thus interfere with the record of that room or that machine, consequently it brings down the wrath of the foreman, and if the man is on piece work, of the workman also. For this reason if no other the safety work should be under the jurisdiction of some department which is not subject to the production department, as otherwise that department in spite of its own best judgment and what would be the calm judgment of the men affected, would allow production to go on, thereby jeopardizing the men on the job.

The hardest plant to thoroughly guard and in which to secure safe practices is the one which keeps no records, but in which the superintendent claims that there have been no accidents for many years. Such a record is desirable and a superintendent who can show it is certainly entitled to credit for safety work of his own, but unfortunately it usually develops that the reason he claims long immunity from accident is that he has a short memory. He forgets that a man broke his arm last year and a man was killed three months before that. These things are not in the record. They came at scattered intervals and they made little impression except on his sympathies.

There is also the case of the superintendent who says that he pays insurance premiums to cover the care of the wounded,

and that discharges his obligations. He should be told, and told with emphasis, that money cannot discharge these obligations. A man disfigured for life has lost more than can be paid by money. A man may earn just as much after his arm is broken and healed, but a man conscious that he has a body that is a drawback is injured in a way that money does not cover. A man who has a crippled and distorted hand cannot rise in some industries except through sheer genius. If he was an elevator boy and his hand was caught in a defective gate, he may make just as good an elevator boy as ever, but who knows into what he might have developed. It is sentiment that keeps us from giving this boy a chance, just as much so as it is sentiment that gives the soldier with the same handicap the preferences. We go to extremes in these matters. The fact that a single preventable accident occurs in a plant should be a matter of deep regret, and something that should at least make every one more determined to see that there is not another. If we take the natural life of man according to the scriptural three score years and ten, the manager who negligently allows the lives of seventy men to be shortened by a year apiece has murdered his man. If more of them would look at it in this light, and not merely in connection with safety work there would be much more happiness.

It is also troublesome to define just what shall be rated as an accident, but this is only of consequence when we are keeping score. A scratch from a nail is usually accidental. That is, men seldom purposely try to do it. If it happens that the nail was loaded with bacteria of the wrong kind, or if the man's physical condition was poor, it may have resulted in blood poisoning, sickness, loss of time, loss of production, expense of treatment, much mental suffering and anxiety, and possibly a hand disfigured with a scar for life. What was the accident? Was it the scratch, which in nine cases out of ten would have healed without trouble, or was it that this particular nail carried infection, or was it that the man's hand was dirty and carried germs which could get into the system through the wound? Was it that the man did not report the accident and get it properly dressed, or was it the fact that

the man was in a run-down condition and did not offer the resistance to the germs that he should? In the last case we can also ask whether the man got in this run-down condition from overwork or overplay.

All these accidents may happen in turn or in combinations, but in any case the accident was started by a nail which was where it ought not to have been. If we charge up nail scratches which occur in a department and which come to the attention of the hospital, to that department, there is danger that the foreman will wink at the practice of tying up each other's wounds, and may even encourage it as the easiest way to keep his score down. That is, if the hospital tries to excite rivalry by posting scores, it may defeat its own ends by tempting bad departments to camouflage its accidents. A casual visitor in a shop with splendid hospital facilities, if he is not with any one in authority, is almost sure to see men bandaging themselves and each other.

The only safe practice is to have all accidents of even the most trivial nature sent to the hospital. There are two problems which arise even then; the first is that of the piece-worker who hates to lose a few minutes to run over and have a wound dressed, or the sensitive man who dreads the physical pain due to the rough handling his wound will probably get; and the second is that of the man who likes to go to the hospital because it takes him away from work that he likes so little that the hospital seems a luxury. The first two cases should be sent, and the doctors should be cautioned that some one of their victims may turn doctor himself some day and give them a dose of their own medicine. Some of the most capable doctors are brutes, probably because their services are needed so badly that no one dares tell them the truths which they ought to know, consequently as they grow in ability and practice they lose all sense of humanity, and cure for the cure's sake and not for the man's sake. The last man, the one who runs to the hospital to get away from work, is probably sick, mentally if not physically, and probably needs other treatment than that for which he came.

We have also to consider that men naturally gravitate toward the best jobs they can get. If a job is dangerous, if

the last man on it was hurt in the regular course of his work, no man wants to take it unless he is making more money by so doing. That is, jobs which show signs of danger must either pay more money or draw a lower class of men. This does not show on the cost accounts, but it is there. During the war a married man was granted exemption on the ground that his dependents needed him more than the country did. On the same ground the more dangerous jobs in the shop should be reserved for the single men. However there is the tendency to hire married men and then assign them the jobs that need doing, and since a married man will usually stand for more than a single man, it is usual to find married men in these dangerous places.

The safety engineering department should also represent the insurance carrier so far as is practicable in dealing with the men. If the company carries its own insurance, as is possible in some states, then the safety department should be the active link between the treasurer and the men. He should pay them, either by a cash payment or by a voucher drawn on the cashier, all their claims whether for medical treatment, for hospital bills or for compensation. The department should also be in a position to exceed the legal payments for compensation whenever the merits of the case seem to demand it.

The compensation laws are framed to avoid the danger of malingering, but even so a thrifty man may easily join mutual benefit associations and secret orders, so that financially he is much better off sick than well. Most men, however, have not been so provident, or are more honest, and their families need every cent of the income which they formerly had in order to make both ends meet. It should be possible to treat such cases just as the general manager himself would have done it years ago when the shop was small, by paying full wages while the man is out of work and adding whatever bonus seems appropriate. At the best our laws provide for rather meager medical treatment and for only about two-thirds pay, during a time when naturally the family expenses are very greatly increased.

If the safety department keeps in close touch with these men they can win their confidence better than any one else.

There is at least one good feature of the compensation laws in that they virtually put a premium on coming back to work in the same place. If a man is hurt and does not show up again there are always rumors of permanent disability and disfigurement, just as soon after the armistice there were wild rumors that a certain hospital in New York City was filled with hundreds and then thousands of "basket cases" (men with both arms and legs amputated), and like that rumor, which was not even based on one such case, these are found, if the man comes back, to be as utterly untrue. The confidence and good will of workmen are worth more to the business than most people think.

Every one realizes that there is a great advantage in having the first choice of workmen, that the tail-enders are not profitable no matter for how little they will work, and that there is not much difference in rates even though there is a great difference in production. The first choice men are not attracted by advertisements, they do not take up jobs at random, nor do they leave them thoughtlessly. They move from one shop to another only after careful inquiry among their friends, and they are pretty sure that the new shop is better than the old before they apply for a job. These men are much influenced by the safety work of the new shop. They are for the most part careful, but if in an absent-minded moment they put a hand in a dangerous place they want to feel that the company will take good care of them.

Knowledge of these conditions is widespread. A shop may let some poor devil go who got mixed up in an accident. He may have come back to his old job, but they found an expedient to relieve him of duty on some ground other than his disability, and they were glad to be rid of the burden. Can they keep this a secret? Not a bit of it. They may next hear from it at some convention a thousand miles from home. Inside secrets are secrets only to those who stay at home. They travel and a black mark is set up in many men's minds.

There is also great danger of an increase in accident cases if the settlements are handled by professional agents from the insurance company. It is impossible for these men to have a sympathetic interest in the multitude of cases that they



must handle, in one shop this morning, in another this afternoon, and so on. A man with a crushed finger is to them a crushed finger case entitled to so many dollars a week and so much medical care. It belongs to case number so-and-so, and if you want to look it up you can find out what the man's name is, but better not because it may be Szczyweinzkicz or something like that and if you spell it wrong the records will get all mixed up. This is of course not the fault of the insurance man; it is his misfortune, and yours if you let him make the settlement. The safety department can pay out this same money and produce the impression that the company is genuinely interested in the man as well as his case. They can also help in other ways besides with money because they are one with the welfare department, and they know the man's home conditions. Likewise with the aid of the medical department and the employment department, they can get him back into the shop and at least mentally occupied long before the insurance man would have the right to send him back to work; in fact, in every way the safety department is in the logical position to handle the financial part of the case than is any one else.



### PART III

#### PROMOTING INDUSTRIAL RELATIONS

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## CHAPTER XXVI

### THE RIGHTS AND DUTIES OF LABOR

**I**T has been such a habit with us to grant the owner of real estate the privilege of putting up trespass signs, and our trespass laws have been so firmly upheld by the courts that we have quite naturally come to believe that there must be a right to forbid trespassing, and the right to privacy and sole enjoyment has, therefore, hardly been questioned. It is time, however, that we should look into the matters and see, not in a radical way, but in a thorough way, whether such rights as they exist in law and in habit may not be subject to considerable modification.

If one of us walks across a friend's pasture in the country there is no harm done, and it is not trespassing. If we tramp across his blueberry patch and eat a few handfuls of berries there is no perceptible wrong done, but if we walk across a man's lawn in the city, and by our example suggest to others the propriety of also doing so, then we do a real wrong and should very properly be stopped. Furthermore our city friend should not be compelled to stop us physically by building a fence, or by knocking us down, but by appeal to the police force which all help support.

This analogy applies equally well to some of the friction which arises between employers and employees. When a firm has invested a certain amount of capital in land, fenced it in and built shops or stores upon it, they immediately assume a right to say who shall or shall not enter. We, for the most part, grant their right to say so because that is the law, and we respect the law whether we believe it to be just or not. Of course the spirit underlying the law of trespass is the prevention of damage. To prevent any one damaging property

we say that the owner shall have the right to prohibit everybody or anybody from trespassing. The owner may classify people. He may say that only well-dressed people shall be allowed. He may say that only men shall be admitted. He may say that only those belonging to certain churches or societies shall be excluded. In all these cases he is supported by the law and we, the people, are responsible for the law.

On the other hand, it is equally legal for a man and his friend to agree not to go through another man's pasture, or across his lawn, or enter upon his land, or into his buildings, but the two have no right to endeavor to persuade others to join them for to do so may in many cases work an injury to the owner. Accordingly we rightfully should consider whether or not the action on either side does harm, rather than whether it is within a law which was a crude attempt made hundreds of years ago to meet conditions which have since been much changed.

Let us apply this to strikes and boycotts. Nearly every shop loses the equivalent of all of its help once every year, not all at once of course but fairly prorated day by day. Moreover it cannot be proved that this larger number were influenced by each other, or that the management was distinctly to blame and that it intentionally or unintentionally fostered the very feeling which produces the outflow. On the other hand, if some one person or a group of persons, with or without cause, deliberately tries to persuade others to injure the company by leaving it there is cause for action, and they can theoretically be enjoined from doing this injury. Theoretically, because there is no punishment enforceable.

Likewise, whenever a concern decides that it will arbitrarily exclude any man from employment it does that man a wrong. If the concern says to John Smith that he shall never work for it, it is doing him a wrong and it is not doing itself any good. It is doing Smith a wrong because Smith is one of a great multitude of men who make it possible for the firm to exist, and because Smith is a part of the great general public which grants the rights by which the concern makes a profit. Furthermore, the concern does itself a harm because Smith, no matter what his present shortcomings may

be, is yet a man; he may change for the better, and he may make an excellent and profitable employee.

All strikes and lockouts depend upon whether or not the people in general control the government. Any strike or lockout must necessarily work harm because it causes loss of production which cannot be made up. The length of the working day is not so very important because each individual has only about so much vitality which can be called forth before he must rest. The days that are lost are important because they can only be made up if the life of the individual be lengthened, which is not at all probable in case of enforced absence from work, no matter what may be the effect of an ordinary vacation from worries.

This harm may apparently be made up to the winner by the increased wage won as a result of strikes, or the saving of wages won by the owners, but either advantage is "robbing Peter to pay Paul," Peter, however, not recognizing that he has been robbed. In other words, the public foots the bill, and since the public also makes the laws which allows it to play the part of Peter in this little drama, it has only itself to blame.

When we consider that the total number of people in this country who are sufficiently organized to conduct a successful strike is much less than ten per cent of all workers, and that lockouts are comparatively few in number, we can perhaps understand why both are tolerated. It is of course because they do not really affect the public in their present state of development. But the real danger is not in their present form but rather in their possible growth and the danger that we are creating a Frankenstein monster which may some day become so large as to swallow up not only the very people who to-day profit from it, but also the rest of us as well.

So much for the dangers. In spite of abuses we still have to go back to the original simile and to admit that the public has a right to determine what constitutes trespass and what does not. No one owner of a vacant lot can hope to keep people from crossing it except by force or a fence, unless he has the support of public opinion. No man can long bar people of a certain sex, religion, or nationality from cross-

ing or entering his land. In fact he cannot pick and choose on any ground that does not affect all alike for a very long time. His reasons for his choice must be rational and must have justice back of them. The fact that a man belongs to a certain society in itself cannot long be held up as a bar to employment. If, however, that society is not law-abiding, and if the man is bound to break laws by virtue of his membership in it, then of course he is personally and individually an undesirable man to have at large, to say nothing of working for some one who is affected by the law-breaking tendencies of himself and his associates. On the other hand, the fact of organization does not necessarily imply law breaking. That it has done so in the past creates a suspicion that it will do so in the future and many organizations will have to overcome this suspicion before they can expect to be treated with respect and confidence.

The right of engineers to belong to local and national engineering societies, the right of physicians to have their organizations, and the right of educators to similarly organize themselves has never been questioned simply because these men have an unbroken record of legality in their procedure. Their potential power for harm is vastly greater than that of all the labor organizations in the country. There have been, however, organizations of employers which have apparently stooped to practices which are hardly much above the level of those whom they oppose. Such practices include black-listing men and refusals to allow men to change employment within the circle of the organization, and by indulging in these practices the organizations harm themselves just as surely as do the labor organizations. They have the one advantage, however, of the benefit of legal advice, and being more patient and looking farther into the future, they are not so apt to run counter to the letter of the law. Nevertheless they arouse as much antagonism, unrest, and suspicion as if their practices were not within the law.

The solution of the problem seems to the general public very simple. Let every organization be fair, open, and above board and for a sufficient length of time to convince every one that it has become habitual and there can be no more friction.



If these organizations of employers and employees will not act honestly and above board because their own best interest demands otherwise, then they should be forced to do so in the same way that individuals are compelled to obey the law. Probably both sides will agree to such a proposition, but each side will probably be able to see only the sins of the other.

Supposing, however, that both sides will play fair. Is there any advantage in organization? Yes, very decidedly so, but only for the advantage that now comes to associations of professional men, which is chiefly one of education and improvement of the individual. Any association will prosper as long as it returns good educational value to its members and as long as membership in that society is recognized as carrying with it respected standing in the profession. If, for example, a society of plumbers lent its efforts to the improved worth of its members through educational work or the interchange of ideas among its members, and if membership in that society was recognized by the world at large as a guarantee that its members were capable workmen, then there can be little doubt but that such a society is very much worth while from every point of view. It is only when such a society becomes drunk with power and overrides the laws for which its own members are partly responsible that it becomes an outlaw and a blot on society. This does not necessarily mean that the right of any individual to leave the employ of any firm can be abridged, nor is there any reason why any number of men should not leave at the same time and for the same cause, if the cause is just. But when men who wish to leave attempt to intimidate others who do not feel the same grievance keenly enough to join the movement of their own accord, then the society does become obnoxious.

Suppose, however, that during the time of abundant labor supply, due to lack of business, a firm sees fit to reduce wages and impose heavy tasks as a condition of permanent employment. What redress have the employees except to strike? They have the redress that is always open. Then can quietly and peaceably leave their jobs and take other and better ones. If, however, there are no other better jobs, then it clearly shows that the employer was meeting the market so far as wages and

tasks were concerned, and a strike under such conditions, if successful, would simply mean that coercion made the employer grant increased prices which he may charge to the consumer as a result of the advertising which the strike furnished. But how can the employees or the public tell whether the firm is making money enough to pay the increased wage out of the profits or whether it will have to raise prices, and if the latter, whether the public can justly be called upon to pay the increased prices?

The only reasonable strike for more money, or lessened production, is one based on a careful and complete investigation made by competent people with all the facts before them. Such a strike, however, has not come to the author's attention. A strike under any other condition virtually says to the working public that the few men in the shop intend to hold up the larger number who use that product and take away from each of them a small sum of money so as to put a larger sum in the pockets of the men who work in the shop. It is as though a thousand workers making soap were to demand that the product be sold for a cent a cake more and that cent be added to each man's wages. It is not the employer who suffers; it is the purchasing public. The man who is profiting from a strike of freight handlers may be paying more for shoes, clothes, food, and entertainment because he is being held up by others who are lining their pockets at his expense, and in the end such a game of robbery cannot be good for any one.

The most vital question which is being asked, however, concerns the recognition of the union. Here again what is said and what is meant is not synonymous. Recognition really means that the firm realizes and admits that there is a union. Every firm in fact does admit that there is a union among its employees, if such is the case, and it is usually quite well informed about the union. What the firm dislikes to do, however, is to recognize the right of the union to control in any way the matters which they themselves have considered in the past their own prerogatives. Among these has been the right to discharge at will. These rights have been previously discussed and the author has endeavored to

show that they do not rest on a broad or sound foundation. On the contrary, the very arguments against this indiscriminate exercise by the employers are equally valid against its exercise by the employees or their representatives. If a question can be raised as to the legitimacy of arbitrary trespass rules enforced by a certain class of people, the same question can also be raised against arbitrary rules enforced by any other class.

The public alone through its legally elected representatives has the right to decide what people shall be allowed or not allowed to work in an industry. This is shown in the general acceptance of child labor laws, and laws affecting women in industry. But more rather than less such legislation is likely, for when an organization of workmen declares that none but members of that organization shall work in a given industry, or when an organization of business men attempt to draw similar lines, they equally infringe on the rights of the people as a whole to regulate its internal affairs. The great majority of manufacturing establishments, stores, and farms have a very much larger list of ultimate consumers than of employees. For the latter to be able to say to the great number, "You will have to pay more for this product than before, because we want more than our share of wages," is absurd, especially as these consumers are for the most part workmen themselves. It is not a recognition of the union which labor leaders demand, but rather that the great body of workmen who are not organized shall permit themselves to be exploited for the benefit of the few.

Finally there is no doubt but that the right to organize must be admitted on both sides. The abuse of the power which the organization brings has resulted in bad feeling which will take generations to overcome, unless some radical purifying power comes to the surface. Wage adjustment by strikes and lockouts is unscientific, and operates to the detriment of labor in other industries. It is also selfish and undemocratic because it is for the chosen few who prove that they realize it by not taking in the many.

May we not conclude that industrial peace can only come when labor unions are compelled to become responsible or-

ganizations, and associations of employers are met by laws drawn by as capable men as those whom they employ to find holes in them? Suppose that a labor union were required to deposit government bonds to the extent of \$100 per member with the Department of Justice as a bond to keep the peace. If the union had a thousand members there would then be an income of about \$4000 which no leader or organizer would jeopardize without thinking many times, because it would assure him his salary. On the other hand there is the painful fact that we do not send men to our legislatures who altogether represent us intelligently and forcefully. The larger firms outbid the public. We are frequently confronted with the spectacle of men of real and accepted ability quitting public life literally impoverished and compelled to make proper provision for their families.

## CHAPTER XXVII

### HOURS OF LABOR

**I**T seems quite generally agreed that eight hours of sleep per day are necessary for the proper recuperation, physical and mental, of the average man. Of course we are not all alike; some men can work long hours and there are also those who find it necessary to have long periods of rest. In general, however, it may be said that the man who works so hard or so long that he cannot recuperate from it in eight hours is taking chances on shortening his natural life. This, however, is only a rough average; it varies with every individual, with the temperature and with the humidity, but more than anything else with his state of mind. Possibly the latter has more to do with determining hours of labor than any other single factor. There is also need of time to eat and for digestion of the food. People likewise need entertainment and relaxation.

All these needs vary in different parts of the world. We who live in the northern parts, who find zest in fighting our way against storms and enjoy the contrast of snow and ice with the warmth of the fireside, do not always stop to think that there are other parts where it is impossible for men to work as continuously as we do. When we travel we are apt to call other people lazy, when they are merely trying to live and to do all the work they can. We forget that we live by the lifetime, and that it is best for all to so live and work as to accomplish the most work in that lifetime. But even in this latitude there is a great variation in the effects of different jobs on the same man, depending of course on the exertion which they put forth. There are the jobs which consist for the most part in being present and ready to do some-

thing which seldom has to be done. We are replacing these jobs, as rapidly as possible, with automatic machinery.

One of the earliest of these replacements was due to the invention of the valve gear for the steam engine which was used in place of a small boy who formerly opened and closed the valves. This not only liberated the boy from a monotonous job but it started the way toward high-speed engines. The effect of withdrawing these automatic jobs from the work of men is, therefore, very likely to add to our opportunities for mechanical advancement. Jobs which consist in being present are just suited to the temperament which likes to go fishing, but hopes the fish will not bite too often. There are not a great number of men who want these jobs, but those who are available are usually quite willing to work long hours. If they try to shorten their hours it is for the sake of lengthening the hours for which they receive overtime pay. The only limit on these jobs is the social limit. These men have the same social claims made on them that other men do, and especially so if they are married. If they work long hours they keep their families away from many social diversions which the family would otherwise enjoy. Sometimes their families will enjoy these diversions without them and in such cases there is frequently trouble. It is sometimes possible for men to be employed alternate weeks on day and night shifts and in such cases the jobs should be divided into a short-day week and a long-night week.

Then, too, some of these jobs consist in "watching the wheels go around" and being ready to make needed repairs and adjustments, put in new stock and otherwise look after a machine or group of machines. The hours of such work are also limited to those prescribed by the custom in that industry, unless the work is such that it demands constant vigilance and rapid work in making adjustments to get the machinery going again after a stoppage. A battery of automatic screw machines on close jobs may require such constant attention, and there may be so many of them, that an eight-hour day is too long. On the other hand, if the amount of work to be done does not justify the shop having many automatic machines and the work is not so close, or if the

machines are in good repair so that adjustments are not often needed, then the operator may be able to work long hours without undue inconvenience. Under ordinary conditions an offer of time and a half for overtime will bring almost any man away from his social ties for as many hours as the superintendent wants. The most serious danger is to the family where the eternal triangle is so easily brought about if a young woman finds herself a sort of daily widow.

Then there are the real working jobs where all day long men must either spend their muscular energy or must continually keep their minds on problems. These include the two extremes, the purely manual labor and the highly skilled labor of the mechanic, the engineer, and the office man. These men nominally work long hours, but it is safe to say that the majority of them could do all that is necessary in a very much shorter time, if it were not for interruptions which they cannot control. A general manager, for example, may say that he works regular shop hours, thereby meaning that he is present that much of the time. His life, however, is usually largely spent in waiting for some one else, in attendance on meetings (half the time of which is taken up listening to some one who has nothing to say) and in general waiting for people to get through talking about things which he grasped as soon as they began to discuss them. The men down the line find themselves similarly situated, except that their idleness is even more the result of waiting for those higher up.

Then there is the inevitable dawdling that comes with brain weariness in the latter part of the day, followed by a brief spurt just before quitting time when a man's conscience spurs him on to make a brave finish. Most men do not realize that they give way to brain fag, but they see others doing it and wonder why. In the shop, the more highly skilled men are almost always able to direct work rather than do it, the exceptions coming from those who do the extremely fine work of scraping or lapping the final fit, whose efforts represent small fractions of a thousandth of an inch. The men who run machines come more nearly under the class of men who are paid for being present, except that they, like professional men, are paid for knowing how.

Salesmen are another noteworthy instance of men putting in long hours and working a short time. A salesman begins work when he first gets on a train as he starts on a trip and his work does not stop until he gets home, at least that is his version of it. Yet all salesmen sit around in hotel lobbies and in other men's offices hour after hour waiting for the proper time to present their cards. It pays to wait. This waiting is not done to pass away the time, for it is the hardest thing that a live man does. It is done because the time to see a prospect is when they are "biting." There is no use fishing in a trout stream in an open meadow in the heat of the sun, and there is no more use trying to sell rubber boots in July to a perspiring purchasing agent. He may look at samples in a perfunctory way, because that is his duty, but if there is any excuse for not buying he has it ready at hand.

From a personal point of view there is no doubt but that it would be better for all these men to do their work as quickly as possible and then go home, or to the golf links, or wherever else they preferred. Possibly they could do this if every one tried to help the other fellow instead of lying back and keeping him waiting. The old notion that men are impressed by the importance of the man who keeps them waiting, or who puts them off on some understrapper, is all exploded. The man who is put off in this way nowadays knows that the other fellow is either bluffing or that his work is very badly organized.

There is, however, besides this waste of others' time, the waste that comes about through lack of appointments, broken appointments, and appointments going over their allotted time. It is our way in this great free land to assume that our friends, business and otherwise, have nothing better or more necessary to do than to listen to our funny stories, and that they should hold themselves in readiness to do so without warning. Consequently we go around calling without making appointments. In some cases there are two valid reasons for this, one that we are afraid that if we telephoned for an appointment we would be obliged to tell why we wanted it, and not having a very good excuse, we would not get it; rule number one of the salesman being, "Get in; no matter



how, get in." The other reason is that we think the man a snob if he does not say, when we ask for an appointment, "Oh, come in any time. I am always here to my friends," and then we expect to be let in through the side door or go in ahead of the line.

Whether we like it or not, it is only right to make appointments, keep them and then get up and go without running over our time. The latter is the most difficult to do, because our errand is so important, and we do not want to stop talking long enough to let the other man express an opinion until we have exhausted our logic. We are also very much inclined to take the short cut of the telephone route. We know that Jones is a busy man, we suspect his lobby is full of men waiting their turn, so we pick up the telephone, knowing that he cannot help but respond to our call or that his secretary will not be sure enough to stop it. So we may use up half of the time allotted to some other man's interview without accomplishing nearly so much as we might if we could actually have seen him.

Let us next consider the man in the shop, the high-grade man who knows how, and who waits patiently hour after hour for the machine to finish the work so that he can set the tools for another operation. To be sure, if the shop is large enough and there are enough tools available, he may set up the work and make the adjustments and then leave the machine for some helper or assistant to operate, but it is not every shop that can introduce such refinements although they must of necessity have such machines. Too often a man of this ability feels it beneath him to operate any other machine in conjunction with his specialty, and so he will not take on work of a different character. Piece-work rates, however, will often make a great difference in his pride, and he may do for money what he would not do for the sake of making the time pass more quickly. However, if he will not do other work he puts himself in a class with those who are paid for being present only and he might as well work long hours.

In all kinds of industry there are a great number of men whose work consists in doing tasks which the machine has not been made to do. One man may find his work solely in tak-

ing the product of one machine and feeding it into another. There may be an attachment for doing this work which the shop does not possess. It may be too expensive, it may not be adaptable to different sizes of work, or it may require too much adjustment for varying sizes. In fact, there may be a dozen reasons why this man should perform a function that can be performed by a machine. If the work is heavy he needs moderate hours, for no one can continue active physical labor over an eight-hour day, nor indeed over a much shorter one. If the work is light he may even stay for a fourteen-hour day without injury to himself.

On the other hand, another machine tender whose work consists in feeding material to a machine, but who has to keep his mind constantly on the job, ought not, for the good of the product or his own good, be allowed to work any overtime, and an eight-hour day may be too long for most efficient work. In this connection consider for a moment the matter of cloth inspection. For such work a man will sit hour after hour and pull down yard after yard and bolt after bolt of goods, examining it for knots and flaws of every kind, and sometimes the goods will be passed along for several minutes while the inspector is daydreaming and so of course he has not had the slightest idea what passed by him.

All these are but illustrations of the differences in the time which men may work on given jobs and it makes us rather wonder if there is anything to guide us in setting a working day except the social side. If it is necessary in a shop that there should be a uniform working day for every one, the length of the day can hardly be based on working necessity or on the tiring quality of the work, for in the latter case the day could only be as long as that required to tire out the hardest worked man. There is, however, no insurmountable obstacle in having different hours of work on different jobs in the same factory. There may be trouble if there are only two sets of hours, but with several different sets there is not much chance to raise objections, and especially so if the wages are based on piece rates or a straight hourly basis, and if the employment department does not seem too antagonistic to transfers. This is always supposing that none of the day-

light hours begin before transportation is available, and that they do not end later than, say, six o'clock, so that men can discharge their social obligations. Night work can, of course, be carried on over longer hours, but as a general rule night work is not wise except as an emergency job to allow a larger number to work continuously by day, and where the worker is paid for being present but not for working a great deal.

Experience during the war indicates that, given sufficient money, men in general will work just as long as they can without going to sleep on the job. However, after the man has reached his physical limit he has to lay off for enough time to make up for the extra time that he gained. Generally speaking, and taking the money reward into account, length of hours should be determined by experiment and experience rather than by the fashion of the day. The eight-hour day slogan is just as unscientific as a ten-hour or a twelve-hour or any other specified hour. It is only a watchword and it means nothing to any one worker. It is a rallying cry, much like a college yell.

The governing principle should be that each shift should be just as short as it can be, and yet allow every man who is employed on a given kind of work to do all the work that is good for him to do, provided that the hours come at such a time that he can take his part in the world as a social being and be not merely a wage earner. The hours should be short, from the employer's point of view, because there is so much overhead charge which stops when the wheels stop revolving. His overhead charges are also less the shorter the time, but they go on just the same when the help are dawdling through the last hour or two of the day after they are already tired. Then too there should be a very careful watch over those who work at machines which require a constant speed of work for the operator. Machines which require the material to be fed in at regular intervals, and which would require the work to be put through them again if a feeding time were skipped, are dangerous jobs, because men who are sick and who should be at home will nevertheless be "on the job" for the sake of the money which it brings, and they will surely suffer unless they are closely watched.

The best interests of the worker are conserved when he earns the most money that he can without getting so tired that he does not entirely recuperate during the night. There must be considered, however, his method of spending the evening. It may be that he goes home and rests, he may go out and dance until morning, he may work in his garden until he is utterly tired out, or he may go to some amusement place where he undoubtedly rests because it takes his mind from himself. All these of course have an effect on the work which he does the next day. He may profit or he may lose by it, but it is safe to say that it affects his employer at least twice as acutely as it does him. Yet his employer has no right to utter a word of protest, because it is out of working hours, and it is not usually possible to prove that the effects of the night before cause the poor work or the small amount of work which he did. If constant records of men's work are kept, and especially if they are kept in graphical form, it is apparent that, with many of them, there are considerable variations from day to day.

Some of these variations are traceable to the weather, or to some other uncontrollable influence, but there will be those which can only be accounted for by the man himself. He should be given an opportunity to so account for them, which will at least give him a chance to realize that the firm is watching him and knows how he is getting along. If it proves that his slump was due to sickness he should see the company doctor at once, while if it is due to late hours or dissipation he should realize that the company suffers more than he does, by reason of the fact that the overhead charges which go on regardless of his absence are usually at least one hundred per cent and often more. It is unfortunate that there are so few jobs where it is possible to keep daily count of each man's production. Most of the jobs where this can be done are those where the speed of production is determined by the faithfulness with which men feed material to machines. In a general machine shop, for example, the only way that any one knows whether a man did a full day's work is by guess, or, if one likes it better, by judgment. If he works on piece work, no one knows which are the fat jobs

and which are the lean jobs for that particular man, so that comparisons based on piece-work earnings are not entirely reliable. It would be a wonderful advance if each man's real work were metered in some way so that every one could get what he earned and so that his condition at the close of each day's work could be compared with his earnings.

Another matter which should be considered and which is rather closely related to the length of the working day is the length of the noon hour. This is almost universally an hour, the exceptions being in the direction of shortening it. In many cases it is cut down to a half hour, this being so in almost all places where every one brings a lunch and treats it as a lunch. Usually such a condition is found in the office rather than the shop, for the office force is more inclined to eat lunch in the middle of the day and dinner at night. The only apparent excuse for the shortened lunch hour is that a full hour is not enough for the digestion of a substantial meal, and since it is not enough we might just as well make it still less. There is, however, some gain in sitting around after a heavy dinner in the middle of the day. Smoking is probably good only as it can be done while relaxing and because it tends to relaxation. Men who do hard muscular work cannot carry through even an eight-hour day without stocking up with heat-producing foods, even though it be midsummer. On the other hand, the office force do not really need a heavy midday meal. In fact, they would be better off with a bowl of crackers and milk and a plate of ice cream.

It has been most interesting to see how the introduction of a second and in some cases a third eight-hour shift affected the lunch hours. In order to get in three eight-hour shifts it was necessary to omit more than a momentary recess for dinner. This was usually limited to fifteen minutes, though in some cases it went up to twenty. The two eight-hour shifts were many times arranged from seven a. m. to three-thirty p. m. with a half hour for lunch, and the second shift from three-thirty p. m. to midnight, if the cars ran as late as that to take the men to their homes. In other words, the two shifts cut the lunch down to thirty minutes and the three shifts cut that in halves. No very evident harm seemed to come from

these abbreviated lunch hours. The fifteen-minute periods did not allow many men to get to the company cafeterias, but usually meant that they must eat as they worked, in the dirt and at or near their machines. The three-shift plan, however, seemed only to be effective with machine operatives whose principal duty was being present. They might in many cases quite as well have worked through the fifteen-minute periods, eating as their machines were still running. Manual workers, such as blacksmiths, of course did come in on these shifts in some places but not in a great many. They seemed to run to the two-shift plan with sometimes a longer shift and an easier gait at night, thus drawing more money but not accomplishing more work.

There is something, however, that does not seem just natural about working at night. It seems to disturb all our ideas of what is right and natural, and all our faculties cry out against it. The men who best succeed in night work, that is, those who come nearest to doing the same amount and quality of work at night as in the daytime, are the men of lowest mentality. They do little in the daytime and not much more at night. As these men become more capable, as they learn to earn money and to spend it, they seem to gain only on the day shift; at night they are just as stupid as ever. This may of course be partly because they are clever and they find that their appearance of stupidity obtains for them certain privileges which they otherwise could not get.

As a patriotic measure night work was undoubtedly necessary and as an expedient to gain production and hold customers who might otherwise be lost it may be profitable, but as an economical measure for making profits it is only in comparatively few cases that it can be said to pay with any type of labor except the watchers and waiters. Of course, there are lines of production in which constant operation twenty-four hours a day and seven days in the week is necessary, but they for the most part deal with operations involving heat, like blast furnaces, dry kilns, pottery kilns, etc., and they do not require the employment of a large proportion of highly-skilled labor. Such few men as are needed of the latter type can command extremely high wages and they are

inclined to be the type that gets rid of its money most expeditiously. Occasionally one saves his money and gets into some other part of the work, but for the most part they do not develop into a type that would encourage any one interested in the progress of humanity to increase the amount of such work that is being done.

## CHAPTER XXVIII

### THE COMMISSARY DEPARTMENT

**E**VEN when a shop or store is located in the business center of a large city the feeding of its employees is likely to be a matter of moment and when it is located miles from regular restaurants the problem becomes one of desperation. In any case a company commissary has to compete with home cooking which is not always of a kind to be envied. The older business men hark back to their boyhood days and refer to the dinner pail as the unfailing solution of the problem. The least actual outlay of money is necessary for the dinner-pail system. Mother puts up a dinner for husband, sons, and daughters, and charges no more for her labor than as if she had prepared them a midday meal at home. In fact, mother is often glad to do it because she can snatch a bite at noon and get a good seat at the movies while her neighbors have to preside over a hot and heavy dinner at home. Her family, however, often feel the lack of substance in the meal they carry, and as soon as possible they relieve mother still more by buying a lunch at the nearest, cheapest, and quickest lunch place. In late spring and early fall the dinner pail does very nicely when supplemented by a thermos bottle, but in summer ice cream is needed and in the winter the absence of hot foods is keenly felt. This want is filled by the cheap lunch place when in summer it provides frozen vegetable lard which passes as ice cream, and in winter the hot gravy stews with occasional gristly bits of questionable meat.

Neither dinner pail nor quick lunch, however, sends employees back to work in the afternoon with anything like the spirit with which they came in the morning. In each case too much of one kind of food is usually eaten. In both sum-



mer and winter hot stews are proving the most popular and most profitable foods furnished. The old New England idea of three hearty meals a day with pie and baked beans holding the position of least turnover on the bill of fare seems to dominate the menu of more than a majority of working people. The one great exception is in the case of girls working in offices whose meals, if carried, consist of dainty sandwiches composed of thin slices of bread lined with a single leaf of lettuce with a dab of mustard on it. With this is a bit of cake. No wonder rest rooms are so often needed. Just so long as the one-hour noon time prevails, we shall have this problem of trying to get people to so eat that they will be fit to work during the afternoon. Most business men find it pays to make their midday meal a very light lunch and then go home to a substantial evening meal. Workmen, however, find it difficult to do this because the light lunch does not last them through the five-hour afternoon and because wife objects to cooking a heavy meal in the afternoon. That is the time to be dressed up and meet her friends.

The solution of the entire problem would seem to involve a complete housing and feeding plan which would provide a lunch at midday heavy enough to have the needed lasting qualities and light enough to allow of comfortable working by one o'clock; and also provide a community kitchen which would send out a complete hot meal at night to households where the wife did not wish to allow the business of the family to interfere with her pleasure. So far as the author knows, however, no attempt has ever been made to do all of this. Some places provide a dietician who gets up balanced meals, which means that so far as they can estimate average needs the muscle and brain foods are served with enough heat producers to suit the season. Practically it is very difficult for the ordinary restaurant goer to tell whether he is in a place which affords a dietician or one which does not, for after all a restaurant which does not offer what the patron wishes to buy and at the price they wish to pay soon goes out of business.

In order to pay, a company restaurant must have a fairly well-distributed load; it must buy cheaply and it must not

have any wasted wages. It must also sell at a fair price to compete with the dinner pail. The general manager should be convinced that every dinner pail driven out of the place is a gain. If it cannot be driven out except by housing he should remember that it costs about \$4000 or \$5000 to provide a house for each family and while he may eventually obtain a good return on his money, it is slow in coming and meanwhile he ties up much capital.

It will seldom fail to show that it pays to serve a good lunch and forget the cost. Our worst enemies, when we are trying to be fair to our help, are our cost departments because they fail to distinguish between visible and invisible assets. They can see checks from customers only at face value. They think the payroll represents all that the workmen are entitled to or want. "Put it all in their pay envelope" is a favorite saying which means nothing because "all" cannot be put there. A dollar in a man's pay envelope is not worth as much as an actual fifty cent food value offered at lunch time. If we could get cost accountants to put the apparent financial loss of feeding employees into the overhead charges and let it be absorbed then we would not be troubled so much over the loss. Years ago every machinist was expected to furnish all his small tools. If we should now be presented with a monthly account of the cost of operating all tool rooms we would be staggered, but we would not at all be likely to go back to the old way even though it would be analogous to the dinner-pail method of handling the food question.

Another fact that should be kept in mind when the burden of feeding employees is considered is that the very location of a plant which makes it necessary to provide meals may be an immense profit in itself, so much so as to make the burden insignificant. All references so far as to expense are based on the assumption that this balance will appear on the wrong side of the ledger. There are only two ways in which it seems possible to avoid this. The first is to fail to charge all the expense which the commissary department incurs to that department, the other is to fail to give as good food values for a dollar as are returned in public eating houses which employees would naturally patronize if they could.

Failure to keep accounts correctly is not so very important to the business as a whole. It simply means that some expenses, usually salaries, heat, light, rent, and other similar items are charged to other accounts. The profit shown, if these are not charged to the commissary department, is imaginary but useful, because it helps keep the management in ignorance of matters which would cause them additional and useless worry if they knew about them. The other way in which the account is made to look right is by the use of food substitutes and by cutting down the size of orders. Food substitutes are not necessarily harmful, for often it is possible to present a most appetizing dish for little money which for the time is very satisfying, but does not have "staying" qualities. Also certain dishes like baked beans are very satisfying and they contain considerable nutriment but they are not especially appetizing. A continuous diet of baked beans becomes almost nauseating and so cannot be maintained, while a diet of French cooking, all taste and no substance, is attractive but leads to starvation. It is this very fact which leads people who habitually dine at restaurants to change so frequently. They crave the appetizing features and yet they must also have the food value. The very rare restaurants which give both are crowded to capacity, and if it were not for the danger of still further overcrowding them, it would be possible to name one or two restaurants in every city of over a hundred thousand inhabitants whose proprietors are growing wealthy and whose patrons stick to them year in and year out. The only difference between them and the failure on each side of them lies in the fact that their food both tastes good and is good.

If it is granted that industrial and commercial establishments can get a chef or steward who can accomplish this, his salary alone almost guarantees an operating loss. A profitable restaurant is usually operated at least sixteen hours a day and it has some customers all the time. On the other hand, a shop cafeteria or lunch room operates about twenty minutes a day and it has to carry almost as large a payroll as if it were a commercial restaurant. It can of course call on a few people from the shop, but for that matter so does the

commercial restaurant call in extra people at rush hours. It requires almost as many cooks and dish washers to carry the peak load in one case as another. Pastry cooks and others who prepare cold dishes can be employed more in proportion to the total load. The employees of the industrial restaurant will demand and get the same weekly pay that they could get in the commercial restaurant and they will get all their meals there no matter what the agreement may be.

Another trouble with commissary departments is that they are side lines, and side lines seldom pay until they become the central object of some individual big enough to make them pay. The larger number of so-called successful small restaurants are only successful because the proprietor is active with the business and because he is content, or has to be, with a smaller income for his own business than he would accept as a salary from some one else.

In practice, the range of commissary activities is very great. The cafeteria idea seems to serve the purpose at present, although some plants maintain a lunch room similar to that shown in Figure 9. As a matter of experience common to all of us, it is better to wait a little between courses for food to find its level than to bolt one thing after another in an attempt to break a record. When men to be served stand in line over five minutes the time seems three times as long as it is, and if there are girls in the line and they have a chance to pick over the food offered they will use up so much time that the line is really and seriously delayed. There is the same psychology that pertains to crowds leaving a theater. They will push and fuss until they reach the sidewalk, then they hate to leave the place.

There is inevitably complaint if the cost of a meal is anywhere near the cost of equally good food and service outside. This is perfectly natural. The firm almost always lets it be known that they intend to serve food at cost. People in general know nothing about actual cost of cooked food served on the table. For instance, they know that sirloin steak is eighty cents a pound, and a quarter of a pound is enough for any one. Therefore anything over twenty cents for an order of steak is robbery. Potatoes cost prac-

tically nothing by the bushel; why therefore should anything be added to the cost for potatoes? If people would only realize that hotels and restaurants do not, as a rule, make large profits except when they cater to the outsider who comes to town for the express purpose of getting rid of his money, and who insists on being conspicuous while he is about it, they might perhaps realize that it is beyond the power of their employer to cut prices at all. There is really no good



FIGURE 9. LUNCH ROOM AT THE LYNN WORKS OF THE GENERAL ELECTRIC COMPANY.

reason why they should expect to get something for nothing from their employer. It is this feeling that prompts many large firms to give the privilege of serving food to some independent concern. They give rent, heat, light, etc., and in return expect their employees shall have food at a reasonable price. What the employees get is of course just what they would get at any similar lunch place. There is no balanced ration, no attempt to make sure of food values, but rather to adopt seasoning that will permit of the cheapest cuts of meat. Letting out the feeding privilege is the easiest way to handle the proposition but, barring the dinner pail, it is likewise the worst.

Another excellent way is serving only a portion of a meal, expecting that all the cold food, with the exception of ice cream, will be brought by the workmen. This is usually carried out on the canteen plan with a thick soup or a thin stew, coffee and doughnuts, milk, pie, and ice cream on the menu. It is expected that all hands will bring their own sandwiches and they will complete the meal by buying at the counter. This is probably quite as satisfactory to both sides as anything that is done. Not all men want soup as a preliminary to their sandwiches and this allows those who make a full meal from the shop menu a chance to buy promptly. There are no trays. Each person buys each course separately, which again distributes the load better than the cafeteria. When, however, one is standing in line and is hungry he feels the need of desserts which, when he comes to them, he should cut down on or perhaps eliminate entirely. Almost any cafeteria will show quite a percentage of uneaten desserts which have been bought because they look tempting to a hungry man but do not taste so good after his real hunger was satisfied.

Another help is the so-called milk wagon or milk station. This is for the sale of milk, ginger ale, and other soft drinks during the working hours. If milk is available around six or seven cents a quart it can be sold in this way at five cents per drink (about three drinks per quart) and the overhead carried. Ginger ale with the red pepper left out can be sold for even less money. It has no food value, but it helps quench thirst and is cooling. The red pepper is useful only to stimulate thirst so it is best left out of the shop drink. The questions which confront a shop considering this plan are: first, whether it is best to allow the sale of it during working hours, second, if it is to be sold what is the best way to dispense it. It may safely be assumed that if men want a drink during working hours they will get it. It may take them from their work for some time but they will get it nevertheless. They may have to go to their locker or wherever they store their dinner pail, but most of them have thermos bottles or they bring pint bottles of milk and keep them in the sinks or in a pail of water. If the concern does not wish

to imitate the ostrich it can centralize all this drinking by selling milk and soft drinks in such a way that every one will know about it and where it can be watched and controlled if loafing or horseplay starts. If it is offered openly there is no doubt but that a few men will buy who would not be enterprising enough to bring it with them.

A study of some thousands of men at The Norton Company's plant in Worcester, Mass., where much work is done under hot and dusty conditions, showed that piece workers and day workers are practically equal in their demands for drinks and that about 80 per cent of the workers take one drink per day and that more men take two drinks than either one or three. Very few, about only 3 or 4 per cent, take three or four drinks. This loss of time may be very readily made up, and is made up by piece workers. How much day workers make up is problematic. The need for milk in shops where dust is in the air is about equally felt summer and winter. The need for ginger ale is much greater in summer.

It is expensive to dispense these drinks, especially the milk. It is not safe to figure the overhead charge at less than 100 per cent. Ginger ale can be cooled, allowed to warm up over night and cooled again without loss, but milk must be kept cold all the time, and even so some will sour, especially if a wet day comes after a large stock is on hand. The only safe way to handle milk is never to have enough, but that is poor practice because every one would then stop to take a drink earlier than he otherwise would so as to be sure of a drink before it is all gone. The greatest call for all refreshments comes when about three quarters of the working period has passed with rather little regard for the length of the period. Men take a drink as though it were a sort of stimulant to carry them through the last hour's work before the time for a complete rest. It is this crowding of the sales into a short period that makes the vending so expensive. The boys who sell it have to be paid for a full day's work, because it prevents them getting a job which would call for full time, and because if they were only required to be there during the sales period they could not use the rest of the time profitably. So the sales places are kept open all day. They sell a little

all the time, but the peak load is well defined, and when it exists there must be enough boys available so that men are not kept waiting their turn. It is less expensive to put on enough boys than it is to let men get in the habit of expecting to line up and start a conversation which may last quite a while after they have disposed of their drink.

The periodic nature of this thirst makes it improbable that milk wagons are a desirable solution of the problem as they must start on their rounds an hour or so before the men are ready for them, and then they keep on going up to closing time. They also only visit a fraction of the men at the time that they feel the need of the refreshment. If the milk station is used it should be so located as to make as little travel as possible in a plant or zone and so that the travel does not go through some departments where quiet is necessary. They should also be so located that ice and supplies may be delivered from the outside of the building so that the shop will not be invaded by outsiders. There should also be in the stations facilities for washing utensils. Paper cups are not suitable and cups of pasteboard are too expensive; but a mug or cup such as is used in the quick lunch places, which can be washed and sterilized in a steam bath before they are used, will prove the most satisfactory.

Whether or not candy should be sold at these stations is an open question, usually determined in each plant by the danger of its spoiling finished work. In a textile shop it is probably bad, in a forge shop it might be good, and hard candy which does not melt easily would be the choice. The use of candy is either wise or foolish according to how much real sugar and chocolate it contains. Many of our returned soldiers have the chocolate habit, so they will probably be able to judge the quality of what is sold to them. If candy is sold there will inevitably come the demand for cigars and cigarettes and so on until these milk stations are in danger of becoming newsstands and fruit markets. It seems wise, therefore, to check this at the very start and confine the sales to milk, buttermilk, and chocolate candy, and to offer only one drink like ginger ale.

In general it may be said that the necessity or value of



milk stations can be judged by the tendency of the men to bring milk or coffee with them from home, or to buy it from enterprising storekeepers or peddlers nearby. If the bubble fountains are full of pint bottles and the corners are piled with thermos bottles, it is probably better to make a business of selling milk and stand the overhead charge for the sake of having the sale out in the open and under control. If all the loafing has to be done out in sight, there are very few men that will attempt to abuse the privilege.

## CHAPTER XXIX

### HOUSING

**D**URING the war the matter of housing the employees of a company became an essential to good employment management. Many families were moved from places where housing could at least be obtained to places where there was none and under the rush of circumstances it was only natural that mistakes were made. The greatest mistake, however, is likely to be perpetuated unless the profession of industrial architecture gives more consideration to the needs, wants, and whims of the workers. The advantage to a firm of having acceptable housing facilities near its plant is only exceeded by the advantage of having the kind of housing which will be a strong attraction for the right kind of men.

Workmen's families are of all sizes. Race suicide is not prominent, however, and large families are numerous. The kind of a house which appeals to the owner of a large business and the kind which appeals to his employees may be very different. A typical family may consist of father, mother, two daughters, and two sons, in which case three chambers will suffice. On the other hand, there may be one daughter and three sons, which will make one more bedroom necessary. It is hardly right to induce workmen to buy houses of less than six rooms: living room, kitchen, and four chambers in addition to bath room. The plans of such a house are shown in Figure 10. If a considerable village is to be built there will undoubtedly be calls for all sizes of apartments from a single room up, but the smaller ones will not be a large proportion of the whole, and the people occupying them will be moving into larger and larger apartments as time goes on.

While the thoughts of an architect are apt to center around

the living room, the thoughts of a workman's wife center around the kitchen. It may be repugnant to the architect to eat in the kitchen, but the wife realizes that a great number of steps are required to carry food and dishes into the dining room and to clear off the table and get them back again. At the very lowest estimate she can save half a mile of travel every day if there is no separate dining room. Pantries are another luxury that waste many steps. A built-in kitchen cabinet is much more to the point and costs less.

There should be room for a coal stove for cooking, which is of course unnecessary in natural gas regions. It may be

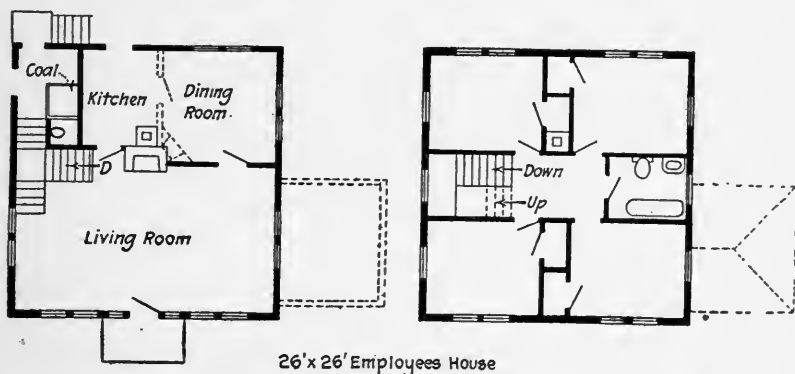


FIGURE 10. SUGGESTED PLANS OF A WORKMAN'S HOUSE.

old-fashioned, but if the housewife does her own cooking and does not know how to use gas it will prove invaluable to her. Then, too, the gas companies unfortunately take advantage of the habits they so carefully nurture and boost the price of gas about the time that coal stoves appear on the local scrap heaps. Home architecture should center around the kitchen, and next to the kitchen should be the "back room." It should be large enough not only for the ice chest but also for a coal bin big enough to hold about half a ton. Since the chambers will usually be upstairs, the bathroom will be there also, but if it is possible to install a downstairs toilet with a bowl and wash basin it will be appreciated many times, and all the more so if it is close to the kitchen. There is no need of making the ceiling high; eight feet will give ample room and sufficient ventilation.

The size of the kitchen itself is very important. There is really more danger of making the kitchen too large than of getting it too small. A kitchen is a one-woman shop and one should be able to stand in one place and almost touch anything from the stove to the sink. China closets are not much needed, as most of the china will be on the dining table most of the time. Even where there is no occasion for a coal stove there should be a chimney and a hood over the gas range to take away the odors. A kitchen 10 feet square is large enough for any family, even if the functions of pantry are included. If it is 10 feet by 14 feet (or possibly 10 feet by 16 feet) it is amply large for both kitchen and dining room for a family of six.

The most troublesome place in the house to get just right is the kitchen floor. It must stand washing. Hot stove lids will occasionally be dropped on it. It must be used all the time so varnish is almost prohibited. A bare, well-smoothed concrete floor is probably not only the cheapest but the best. More expensive but very fine is linoleum laid on either a soft wood floor or on concrete. It will outwear almost any other flooring, especially if the quality known as battleship linoleum is used. Hard-wood floors made of yellow pine are, however, the most common. If rip-sawed they are not bad, but if they are the plain-sawed boards they ultimately splinter. These floors become almost black if treated with any of the ordinary floor oils, which many women consider an advantage because they hide the dirt. Maple flooring is not often used in the cheaper class of houses, because of its cost. The old-fashioned oil cloth was not very bad but it was not made of good materials and was not thick enough to stand the wear.

Next come the sleeping rooms. Small rooms with cot beds are well liked. Small rugs about 8 feet by 10 feet are easily obtained, and if the rooms are 9 by 11 a very narrow hard-wood border allows the use of these rugs. It is better to make the rooms rectangular so that rugs can be used, for every one avoids carpets on account of the cutting and fitting and taking up and beating and relaying, but every one likes a good rug that can be easily taken up and cleaned when necessary. The ventilation of the bedrooms should also be

considered and can frequently be secured by placing doors so that cross currents of air can be induced to flow no matter which way the wind is blowing. If bedrooms and bathroom can be square, that is, the side walls run clear to the ceiling with the walls vertical all around, it will be appreciated. In spite of the time-honored and entirely truthful tales about the use of bathtubs as coal bins, if a proper bin is provided there is little doubt but that bathtubs will be more and more used for their legitimate purposes by our best working families. The bathroom floor offers the same problem as the kitchen floor and can be solved in the same way.

The heating of the house is another important matter. The great temptation is to put in a small heater of whatever kind is used, relying on the maker's guarantee of a 70 degree inside temperature in zero weather. An expert can make even a small heater do this by frequent feeding of coal, but what is required is a heater that will give heat a few minutes after it is opened up in the morning and continue to heat with the small amount of fuel which the wife puts on in the middle of the day. This means a large heater, whether it be hot air, steam or hot water. Since the price of a hot-air outfit is necessarily less than either of the other two it is very apt to be the choice, and it is a very good choice except when a cold wind is likely to come from the north for several days in succession. Then it becomes impossible to heat the north side of the house. A coil of pipe in the furnace of the heater connected to one or two hot-water radiators will often, however, cure this trouble. As between steam and hot-water heat, the family that lives in the house may not be able to tell which they have. Hot water responds more slowly to open drafts and carries its heat longer, and if cared for intelligently it may give a more even heat, but if neglected it will cause longer periods of shivering.

Heating of water is another problem. If coal stoves were used exclusively it would be the logical thing to put in a boiler and use the waterback in the stove, though any less efficient scheme would be hard to find. Since gas is so generally used there should be a gas heater for this purpose even though it is very expensive. A separate laundry is desirable

but not necessary, except in a few homes. Most housewives who do their own work prefer to wash in the kitchen. The set tubs make an excellent table through the week and do not take up much room. On the other hand, and especially while there are small children in the family, it may be very desirable for the washwoman to have a place by herself, perhaps in the basement, so that the woman of the house may go on with her regular rounds of duty.

Thus far we have considered the absolutely necessary parts of the house. We must, however, make an appearance. There must be a front hall or reception room and a living room. Parlors seem to be things of the past and rightly so. The reception room has also dwindled in many recent cases to a storm vestibule just big enough to get into and close the door. The living room is the main room. The space actually used by a family of six for living purposes, with an occasional caller, is about 200 square feet. More is for show only and for the very occasional wedding or funeral. Whether a fireplace can be afforded is a question. It is not altogether a luxury for during at least four months of the year in a New England climate it saves the starting of a fire in the furnace. If the family lives in the kitchen there is not much advantage in building a fireplace in the living room.

The process of evolution going on in these families is of course away from the kitchen toward the living-room and dining-room stage. Not all houses need have all the chambers furnished at once. If houses are rented there is an economy in building some with only four rooms and another with more, but if they are to be sold, the purchaser should not be asked to bet on the future size of his family.

The size of lot upon which the house is built is an exceedingly important item. Bearing in mind the tendency toward automobile life the small lots near large cities are a necessity. They save time spent mowing lawns, tending gardens and shrubbery, and shoveling sidewalks. With the beautiful drives and parks for the upkeep of which we are all taxed it seems a pity for every one to try to have a little exclusive park of his own, for unless one can control at least an acre of land he cannot make much of a park. Gardens for vege-

tables are better if located at a little distance from the home rather than close by the house.

Another factor which the purchaser or tenant will consider is the location. He wants to be within walking distance of the shop, which usually means not over a mile, but his wife, and especially his daughters, will insist that the house shall not be in the back yard of the shop or of any shop. If there is no easy way to get from the residential district to the shopping district except by passing the shop, that district had best be left unhoused. This is somewhat of an argument against grouping a number of shops in one locality or allowing a shop to grow too large. If we can have all the space within one mile of the shop and outside the half mile circle for housing we can place 6500 families on the assumption of 5000 square feet for each lot and as much more in streets and parks. Each family will average about one and one-half workers, except in the textile districts where the average will be at least twice as great, giving us 10,000 to 20,000 as the limit for a plant with all the workers walking home to lunch, and all far enough from the shop to feel that they are home when they get there.

Thus far we have discussed the question of housing only from the employee's standpoint and we have dealt with single houses only because the largest number will live in single houses. A two-family house is not objectionable, however, because almost any two sets of people can adjust themselves to each other, but three almost always split into a clique of two. The lone family soon moves out but only to be replaced by another which in turn either gets out or else breaks up the combination by forming a friendship with one of the others. The only successful three family combination is one in which one family owns the house and rents the other two apartments. The two tenants will then form a defensive combination and fight for their rights.

The concern which goes into housing usually does so for one of two reasons, first, because they find that they cannot expand or even keep their force together without it, and second, because they think it good advertising. Concerns which proceed upon the first plan will usually demand economy and

so-called efficiency, but those who follow the second will spend a lot of money before they come to a realization of the small returns for such large outlays. There are two stages in the development of a housing plan. The first, when the housing is sufficient to attract the necessary people to operate the plant, and the second, when it is large enough so that no one has to be hired who lives out of walking distance. The first stage merely covers a necessity; it shows no profit on the books, in fact it may very likely show a loss. It may be that an increase in wages for all hands is prevented at this stage of the development but no one knows for a certainty. There is little likelihood that the houses will rent for enough to cover a fair return on all the expense incurred. The greatest value is having met a necessity. The second stage, when every one who works in the shop lives within walking distance, marks a distinct economic gain. It may be that the employee profits by his saving of carfare, time, and luncheons, or it may be that the employer profits by attracting people at a lower wage or because he has the choice of a better grade of people. The apparent loser is the local transportation company, but that company will probably take the broad ground that the excess call on them for transportation morning and night can only be met with a loss, and that the profit comes from the rides paid for by their families, even though the total so spent is less than that which would be paid for riding to and from work. Thus the establishment of ample housing near the shop does not transfer a loss from one party to another, but it creates a distinct gain for every one.

If the employer goes into housing from altruistic motives, or if he does it for advertising or for show, he will undoubtedly hire an expensive architect and build a beautiful village, but his experiences do not have much in them to aid the firm which goes into it for revenue only. There is also a question, which is open to debate, as to whether a firm which builds a model village and sells below cost is doing right by his workmen or by his competitors.

From the point of view of the employer who is in need of housing, or who sees the economic gain from it, the best housing is that which satisfies the workman, or more especially his



family, and which costs him the least in the long run. There is a distinction between "cheap" housing and "low cost" housing. The former is obtained by light flimsy construction and poor workmanship; the latter by so designing that the maximum useful space is placed within the minimum of walls and roofs, and by using economically such materials as will give the maximum of wear before they need be replaced.

The design that gives the most room for the least money is the one which is nearest a cube. For a single house, built around the kitchen as previously suggested, such a design

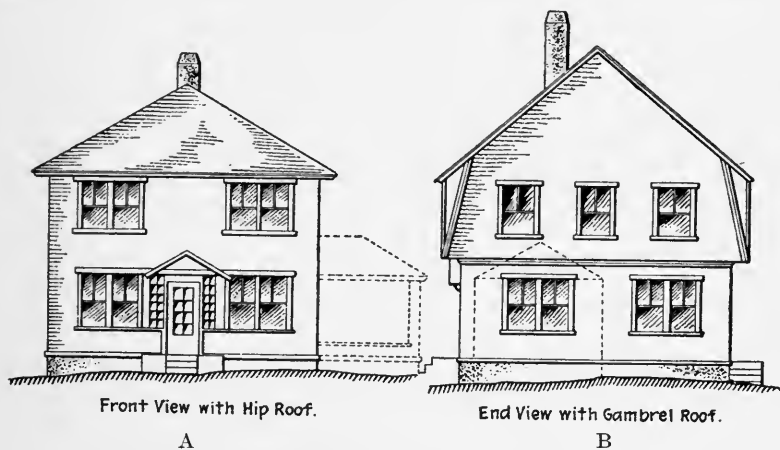


FIGURE 11. SUGGESTED TYPES OF WORKMEN'S HOUSES.

will give a building about 26 feet square, two full stories high, and with a hip roof, a front view of which is shown in Figure 11-A. The plans of such a house have already been shown in Figure 10. The first floor should contain the living room, kitchen, back room, and toilet. The second story will be divided into four sleeping rooms, each 9 feet by 11 feet, and a narrow but ample bathroom. This floor plan gives small closets in each chamber. These can be made deeper by lengthening the house about one or two feet. If a little more luxury is needed a fireplace can be built into the living room, using the same chimney with an additional flue that is used for the kitchen. A porch can be added at the end of the living room as indicated by the dotted lines of Figure 11-A, and when the dining-room stage is reached the necessary space can be taken

from the kitchen and back room and a small dining room made. This plan gives four corner sleeping rooms with cross currents of air and doors all at the center of the second floor so that any circulation of air that is possible is obtained. The objection to the plan is that the house is essentially ugly, and no amount of shrubbery grown around it can make it much less of a blot on the landscape. It will, however, suit the people who live in it and it gives the owner extremely good value for the money put into it, and ugly as it is, it is not so ugly as the three-tenement house commonly known as the three-decker.

This house can be slightly improved in looks by giving it a gambrel roof as shown in Figure 11-B. This costs more because the gables are added on each end and the dormer windows must be added for each sleeping room in order to obtain the circulation of air needed. By slightly modifying these houses with different designs of stoops and piazzas, making some face the road and some at right angles to it, building some of shingles and others of stucco, a pleasing variation can be obtained which will make the casual observer think that he is in a model village designed by some great architect. If there is also added curved streets, trees and shrubbery, a very pretty village is obtained. Half the effect of a village is obtained by what is concealed. Curved roads lead one to want to see what is around the curve. Trees and shrubbery conceal, and in sufficient profusion make almost anything that man can build beautiful, or at least bearable.

Such a house as has been described can also be joined to another as a double house. Double houses are not, however, desirable. They add a little to the available space, if each half house is allotted the same room as single houses, but that is not always enough advantage to offset the decreased ventilation in the rooms on the sides which adjoin. The next home usually considered is a two-family house, each having a floor one above the other. If the housing is a renting proposition this is very acceptable, but if the houses are to be sold most families will prefer to have a single house or else build a three-decker and rent two flats, occupying the other themselves. While this does not make for happy living conditions

it is profitable as the rent from two flats usually pays all the expenses of the house and gradually reduces the mortgage.

The greatest objection to the three-decker is its appearance. It cannot by any possibility be made good looking. It stands too high for even trees to conceal and it is long and narrow as well as high. Two- or three-deckers are sometimes placed side by side and the whole then made nearly a cube. The architectural development is handled more like a city block which is in turn an imitation of an Italian urban castle. That is, the first floor is stucco or covered with wide weatherboards, the second, shingled or narrow clapboards and the third has windows in pairs with an arch over them and columns between, all being surmounted by a heavy cornice. Such an effect carried out in stone and brick is very effective, but when done in wood and left unpainted half the time it is not so very much more impressive than the isolated three-decker. It has also the disadvantage that the rooms in the two adjacent sides look directly at each other and are necessarily dark.

There is also the Philadelphia style house, built by the mile and every one the same except for the number on the door and the cut of the window draperies. These houses appeal to the automobile family. They cost little. Each room has some sort of a window; they are easily heated in cold weather; the sidewalk is easily shoveled and they are usually located near the shopping and theater regions. They must be attractive in appearance to some people or they would not be tolerated.

The apartment building is also not so likely to appeal to employers except as an adjunct to a village. He may want to build a large building which is a combination of hotel, club house, and apartment house, but it is little more than a transient proposition. It may house new arrivals in the company's employ while they are looking around for a permanent place. It may appeal to newly married couples, and it may be a show place at which to put up visitors when the officials do not care to or cannot invite them home. Such a combination apartment house and hotel brings in problems of management much apart from those of manufacturing. Any firm undertaking it is apt to discover that it is necessary

to employ some one who knows the business to conduct it, and then they are very sure to discover that if the salary which they pay such a man is charged up to the operating costs, there is a sizable deficit. That is, such a hotel, or whatever it may be called, is not likely to be large enough to pay the income to the manager that he can earn working for some one else. There is no reason for expecting competent managers to leave good jobs and take up similar work for a manufacturing plant where no one knows the hotel business and subject themselves to the added restrictions of that organization. Some of them do it without either pleasing themselves or the manufacturers. A hotel only pays when it is large enough to pay a manager a good income, which he earns by scrutinizing every expense and when it can exploit every source of income to the limit. Just as soon as an employer starts a hotel every one gives up paying tips, or hat checks. In other words, they do not expect to stand for any of the methods of extracting little extras which they cheerfully pay when they are in a regular hotel. They will kick about prices of food which they would never think of complaining about under other conditions. The only way such a hotel can be made to pay is to conduct it the way other hotels are conducted; in other words as an independent unit of sufficient size to insure business enough to carry the overhead of a capable organization. Because a \$6000 man can succeed with one size plant is no assurance that a \$3000 man can succeed with a plant half the size.

It is not likely that firms will undertake to any very great extent the building of apartment houses for single men or women. It is not worth so much to get them within walking distance because with them the time away from the shop is apt to be a drag rather than an asset. It is the man with a family that is the problem. In fact a housing plan with fairly roomy houses such as described also takes care of the single men and women because each of the small families that buys or rents a house is quite likely to offer a room to rent.

Whether houses are sold or rented, the relation of landlord to tenant is bound to occur in its principal form for some time. If a sale is made it will most likely be a conditional

sale with only a small equity owned by the possessor. An outright sale for cash is very unusual. Many of those who buy do so with no expectation at the time of ever completing the purchase, but they buy because they can thereby get into a house without fighting for their children's existence. If a sale is made it will usually be necessary to make it subject to a first mortgage, which may be held by a savings bank, and a second mortgage held by the company. This second mortgage is the one on which payments on the principal are credited. The bank mortgage can undoubtedly go on indefinitely if the places are kept up.

Some firms prefer to own all this property and offer it for rent only to employees, and in such cases when the relations of employee cease he will be expected to give up his tenantry. Others take the extreme ground that they are not in the real estate business from choice, but want to get out of it as soon as possible by selling the house, preferably, of course, to employees who are old and faithful and who can be relied on to stay. Both firms, however, overlook the real reason for offering housing which is to get a sufficient supply of help within walking distance of the plant to man the shop. In order to do so there must be entire confidence on the part of the workman in the justice and fair play of the employer, and that means usually on the part of the foreman. Ask almost any man from the shops and the factories for whom he works and his first reply is the name of his boss, then he is ready to tell for whom his boss works. A single unjust eviction early in the housing work will excite a distrust which it will take years to overcome. A firm really cannot afford to dispossess a family until the neighbors demand it, and never because he ceases to work for the concern that owns the house. The fact that a tenant is also an employee ought not to influence his tenancy. If it does he is an object of charity, or else he is not being paid his full value in wages. For this reason it is best that all the workers' relations to the housing proposition should be through people with whom he does not come in contact as an employee.

If a firm goes into housing with the idea of investing a small sum of money and then building more houses as pay-

ments are made they will make very slow progress. Suppose that \$100,000 is appropriated and that with it twenty houses are built and sold. If the owners of each has paid down \$500, or 10 per cent of the purchase price, it cannot be expected that over \$150 will be paid on the principal of each during a year, or a total of \$3000 per year, which is not enough to build another house until eight months have passed. At this rate it would be almost thirty-six years before one home a month could be built, unless more money is put into the venture. It may be safely stated that at present in the northern part of the country at least, \$5000 is none too much to estimate for each house. The \$1500 or \$2000 house of which we occasionally hear is based on much less room than has so far been referred to and prices that have a historical value only.

A concern with 5000 employees in many lines of manufacturing will have an actual capital of about \$5,000,000. If it finds it necessary to provide housing it may find one or two hundred houses to attract the necessary employees to carry their load, but if they are going to house enough of their men to bring them the greatest saving—that due to men living within walking distance—they will have to build approximately 2000 homes, which in turn means another \$10,000,000 invested in real estate. Half of this can be placed in savings banks and the other half can be wiped out in from ten to fifteen years by a sinking fund for rents or a system of partial payments if the property is sold. It is thus a problem of large magnitude and one which any firm may be pardoned for approaching with reluctance. These people must live somewhere, however, and that somewhere will be wherever a real estate speculator has been able to get hold of an attractive plot of land cheap enough, but located with very little references to the place where men may find work.

It would seem that there might be real estate operators glad to work with employers to develop suitable areas. Their interests, however, are purely selfish and the problems of employment are not their problems; consequently they are not altogether sympathetic toward any proposition that does not promise them their maximum quick returns on money in-

vested. If an appeal is made to the local chamber of commerce the best that can be done is to ask for a general housing plan for all industries, which will surely result in building where all shops are as nearly the same distance as possible and everybody has to use the trolleys, which is just what the individual employer wants to avoid. The problem is really the problem of employers, and he is actuated by just as selfish motives as he is in any other part of his business. He should be willing and anxious to carry his own burdens. If he moves his plant into the country he should count the cost of housing as part of the necessary capital invested, and just as necessary as the buildings to house his machinery and materials.

## CHAPTER XXX

### HEALTH AND SANITATION

**M**ANY managers are of the opinion that if the local city ordinances regarding sanitation are amply strict, and that if they are complied with there is nothing further that they should be called upon to do. However, no matter how stringent these regulations may be or how well they are enforced, there is still a great need for education along these lines, for health and sanitation in the shop depend very largely on cleanliness. Cleanliness is closely tied up with insurance risk. Greasy papers, for instance, in which food was wrapped make an excellent foundation for spontaneous combustion. Posting general orders to clean up does no good, for what is everybody's business is nobody's business.

Some shops pride themselves on looking dirty, on the ground that they are too busy to clean up. This is foolish, as it costs no more to keep clean all the time than to upset production occasionally and have a general housecleaning. Chips in small quantities can be removed without stopping the machinery. Oil pans save oil, as well as prevent floors getting oil-soaked. Greasy belts do not pull; they only go around. Wiping chips from machine tools with waste for lack of brushes consumes the waste. Drawers full of greasy overalls and closets full of old newspapers cannot be used for legitimate purposes. In fact, it is a question whether closets and drawers have a legitimate place in a shop at all. Everything ought to be out in the open, and visible even to the casual observer. If overalls are too dirty to be worn they should be washed, or thrown away. The same applies to toilets and locker rooms. Why should there be privacy? In our army camps there are no such things as partitions, let alone doors



inside the toilets. Light is present everywhere. Lockers for clothes are prescribed by law in some states, and the law is obeyed to the letter, but is there any worse plan than to store one's apparel in a tin box a foot square and three feet high?

Looking at these matters from an employment point of view, we must admit that men seldom, if ever, inquire in the employment department about them, but if the general manager will give up his motor car occasionally and ride in the smoking seats of trolleys he will hear things that will doubtless surprise him, regardless of how much he tries to make his shop a model one, that is unless he has taken advice and suggestions from the shop, or unless he used to work in the shop himself. It is simply surprising how well men understand the condition of business and how clearly they see through the camouflage which employers sometimes throw around their efforts to make money and at the same time appear open and broadminded.

If it were not for state laws, it would be better to check all garments and hang all coats on a standard coat hanger where there is light and a circulation of air. Where this has been tried, however, there is dissatisfaction, due not to any inherent difficulty with the plan, but to the inadequate number of people assigned to do the checking, especially on the exit side. Men would rather fight with each other for ten minutes in the endeavor to get to their own lockers than to wait comfortably in line the same length of time, and any man who is not outside the shop in ten minutes feels as though he were inefficient. This feeling is usually fostered by the transportation companies. They want to pull out their trains or trolleys the instant their cars are full, and in consequence every one wants to get the first car. An arrangement by which people are admitted to the car through a turnstile, and only as many are admitted as can be comfortably carried, is helpful. The cars can also be so distributed that the occasional employee who wants to strike one more blow with his hammer after the whistle blows can do so, and yet not have to walk home. Any manager who deplores the avidity with which his men leave their work should look into the conditions surrounding it and see if he himself is not partly to blame.

Another item of consequence is the storage of food. No matter how good the food that is offered by the company restaurant or cafeteria there will always be some who prefer their dinner pail and bottled coffee or milk. Left to themselves they deposit these where they can easily find them, and having them near at hand, it is only natural that they should stop around ten o'clock to consume them. This takes time and also in certain cases spoils work, for some products are ruined by discoloration, and a greasy doughnut laid on top of some finished product may make it worthless. Food brought into the shop should be stored in the lockers or checked in such a way as to be obtainable only out of working hours. In some places refrigerators are provided and milk bottles left there, but the thermos bottle has become popular and it does not now seem necessary to provide refrigerators.

Personal cleanliness should be insisted upon and men should be discouraged from going out at night without washing. In one way it is none of the company's business how its employees look on the street, but in another way it is very much their affair. The employees have no way of enforcing a standard of living but the company has, and while there may be instances where dirty men are prosperous and excellent mechanics, they are rare. Cleanliness of work clothes is another item with which the health department may well concern itself. Usually if arrangements are made so that it is easy for men to send their overalls to the laundry they will take advantage of it. Some wives would rather have the five cents that this service costs, but for the most part they can be depended on to keep their husbands looking neat. The worst man to handle is the man who is so busy that he has no time for cleanliness.

Corners and cuspidors are next on the list. Several firms paint the floor and the walls at each corner white, and put a cuspidor there. This is for two reasons, one that a man does not like to be the first one to spit on a clean spot, second, that the cuspidor will show more plainly. Painting of walls and ceilings is a part of the job. How often it can be afforded depends on the need and cost of light. Entirely apart from the quality or quantity of work which can be done under

different lighting conditions is the effect on the man himself. It is almost impossible to do fine work in dirty, crude surroundings. There is a psychological influence that is felt by the most obtuse person. If the work is coarse and crude, then there is little need of expense for light. In a storeroom for castings it may be an open question whether to secure light by means of whitewash or electric lights, but if the work at hand demands the use of instruments of precision there is little doubt which is cheaper.

Floors and windows should also be kept clean. Without supervision floors will be swept about once a week and windows never washed. In fact, it is not absolutely certain that it pays to wash windows in some places. They accumulate a certain amount of opaqueness in about a week after being washed and they do not seem to get much dirtier for an indefinite period. That is, there is certain dirt that will cling to glass but the rest falls off. Window washing in a machine shop or foundry becomes more a matter of pride than of profit. The effect on the men is mostly that of inciting their pride in the shop. The opaqueness of normally dirty windows is about the same as that of clean ribbed glass which is so much used, ostensibly to throw light into the center of the room, but practically to prevent the men from seeing outside the shop. Ribbed glass is of course a greater accumulator of dirt than plain glass and is also much harder to wash.

Dirt is usually defined as matter out of place, on which score some machine shop superintendents claim that their floors are not dirty as what is on them belongs there. There is a growing tendency to wash even machine-shop floors. This is made possible by the change to concrete floors under cranes and where heavy work is done, reserving the wood floors for places where the work is light. Cleanliness in machine shops is partly a matter of sentiment and partly business. Men will get cut and continue to get infected wounds, if cleanliness is not demanded, and they will stumble and fall on things in the dark if there is not light.

Every day should be clean-up day around the outside of the buildings and in the yard. Lawns and shrubbery simply represent cheap and effective means for keeping clean certain

unused areas. It is easier to mow grass than to pull weeds, and it is much more effective than trespass signs. Even the most ignorant immigrant will hesitate before dumping a load of bricks in the middle of a lawn, but any theory that grass and shrubs will take care of themselves will be soon disproved by a trial.

Mud is another expensive enemy to production, if the shop is big enough to have more than one building. Some shops dodge the question by the use of underground or covered and floored passageways. These, however, are expensive. Mud between buildings means loss of time from men picking their way around instead of walking freely; loss of time on hand trucking, and substitution of teams where hand trucking would be cheaper. As soon as a firm installs storage-battery trucks it builds good roads through the plant. Horses say nothing about cobblestones and mud, and they eat little if any more when they are working hard, but a storage battery writes its own story of wasted current. Men do not protest because they do not expect it will do any good, but the cost accounts show plainly what the men who have to work in mud would like to say.

Cleaning machinery, especially the machines such as centering machine drill grinders, tool grinders, etc., that are used by a number of men, also comes under the head of sanitation. Again what is everybody's business is nobody's business. It is hard to get a lathe hand to clean his machine when he sees the drill grinder cleaned by a laborer. We are all perfectly willing to do menial work, if there is no menial around to do it, but as soon as a servant appears we want him to do it all. We all go camping in summer and clean pots and kettles and make up cots, but as soon as there is some one to do part of it we want it all done for us. But there is really no good reason why a man to whom we pay 80 cents an hour should knock off work an hour early on Saturday to clean up, when a 40-cent man would be glad to do it in half an hour if we give him time and a half. The time given in so many shops for each man to clean up is looked on as a sort of picnic or gift by the management. It is harder work than going on with production would be and yet the men look at it as an

agreeable change. It certainly does not hurt the turnover to give it and yet from a financial point of view it seems like paying out two dollars for something done that plenty of people would like to do for one.

Another matter very closely associated with health and sanitation in the shops is that of physical examination of employees, and it has become a rapidly growing custom to furnish free physical examination to employees upon their entering the service, and in some cases at periodic intervals afterwards. The theory underlying this examination is truly social and hardly a matter of employment. It is usually, however, linked up with the employment service and for that reason demands attention.

As a social precaution there is no doubt but that every one owes it to himself, his friends, and all with whom he comes in contact, to keep well and strong and able to carry on with his share of the work which comes before him. He cannot afford to neglect oncoming disease or injury, nor can he rightfully take any chance of spreading disease. It is a fact that public neglect of the situation has driven employers into the supervision of the health of their employees and has forced them to install hospitals, such as are shown in Figures 12 and 13, and yet some will ask, "Why will an employer spend money unless he does it for profit? If he does it for profit, there must be something selfish about it." As a matter of fact there is a selfish side to the employer's enthusiasm and there are abuses of the plan. These things, however, are not inherent and can, and undoubtedly will, be done away with when the public is fully informed. The profit to the employer comes through the fact that a well man has an entirely different attitude toward work than a sick man; his tendency toward carelessness is not so great and he is not merely able but anxious to do his work. It is the normal state for all of us to work. Most of us can find work enjoyable, if we are strictly fit to do it, but a sick man can rarely enjoy any kind of work, or pleasure either, for that matter.

The abuse of the system is in the ease with which it can be used to hasten the departure of undesirable men from the firm. There are very few physically perfect men. Almost any

one can be rejected by the medical department on some score or other. On the other hand, there are very few men who cannot pursue some occupation to great advantage and build up their health at the same time. If the medical department is allowed to reject men permanently, except for contagious diseases, there will be a suspicion that it is a part of a system of discrimination. Every plant offers some opportunity for men not altogether perfect from a physical standpoint. A



FIGURE 12. MEN'S DISPENSARY AT THE LYNN WORKS OF THE GENERAL ELECTRIC COMPANY.

steel mill may be a bad place for a man with heart trouble, but every steel mill has a repair shop, a carpenter shop, or an office where such men with training can safely work. Tubercular men can work, if the disease is arrested, in places where great activity of the upper part of the body or vigorous breathing is not required and such jobs are not scarce. The old idea that a tubercular patient should be outdoors in all weather is discarded. He needs quiet and rest until nature walls in the disease, then he can live as the rest do. Even victims of venereal diseases, once cured past the communicable state, should not be debarred from work.

In so far as an industrial medical department departs from the methods it would employ if it were a public institution it is subject to scrutiny and criticism. It is really the advance agent of a general service which must surely come as a result of its own missionary work. Even then, however, when it does become a public function to make physical examinations there will be need of industrial physicians in each shop to in-



FIGURE 13. HOSPITAL OF THE NORTON COMPANY.

terpret the examinations in terms of the work to be done in that shop. Unfortunately there are not at present great numbers of industrial physicians who can do this for their own examinations. That is, there are not many who know fully what the requirements of each job in the shop may be in terms of physical efficiency, and there are not many interviewers in employment departments who can interpret the medical examiner's report in the same way. It would seem, however, that it would be easier for a doctor to acquire this technical knowledge than for the interviewer to gain an adequate knowledge of medicine.

This knowledge of the physician must be first-hand knowledge to have value. No job analysis will take the place of actual contact with the job. If the work is dusty the physician ought to live in that dust for a time, otherwise he will never know how it feels. He ought likewise to go out into the shop and perform some of the typical operations and he ought to be kept posted and allowed to watch the new processes which are introduced. When the examining physician shows by his conversation that he is familiar with the job for which the man he is examining is applying, he can get the confidence of that man. If, on the other hand, he makes a hurried, superficial, perfunctory examination, he arouses a feeling on the part of his patient that he was looking for something wrong and was disappointed in not finding it. The author has seen men passed by a very prominent industrial physician at the rate of one every two minutes. At this rate he may have been able to catch the most serious cases of men who could not rightly be employed anywhere, but he could not give consideration to the advisability of employment in one part of the plant or another, nor could he by any chance establish a feeling of confidence on the part of the man whose first contact with the plant was being made.



## CHAPTER XXXI

### REST AND RECREATION

**W**E all want to live a long and useful life, and the amount of work we do in a lifetime should be the measure of our usefulness, but how long one should work without rest depends so much on the work, and on the physical and mental condition of the worker that it is impossible to lay down a rule that workers in some trades should have a rest period but in others not. Rest periods are a matter for experiment and trial. In one plant it may be found beneficial to stop all work in the middle of the morning, open the windows wide and go through five minutes of calisthenics. In another, it may increase production for men to stop work for a few minutes and sit down and loaf. Or if it is found that a gain comes from a stoppage of work in which the men can get a drink of milk, or eat a doughnut, it may be that the work is at a pace which makes great demands on men's strength, or is monotonous, or in some way saps their physical and nervous vitality. When work is monotonous, and requires close and concentrated attention, it is necessary to give frequent rest periods, but if the work consists in merely being present or if it requires heavy work for a few minutes followed by relaxation, then there is little need of rest, for the work furnishes its own rest periods. In this connection Figures 14 and 15 are of interest as illustrating approved types of rest rooms.

If the one who lays out shop work has done that kind of work himself he can almost always lay it out in such a way that it can be carried on without undue fatigue and over the usual working day. Scientific management says, "Keep a man at a machine and be sure everything is brought to him so that there will be no break in his production." Nature says to

him, "Cut loose from this and do something different; your nerves are not made of steel and constantly doing the same thing over and over will wear them out." So he gets another job, and often without realizing what it is that makes him listen to the attractiveness of the new job. He may also change jobs in order to get a vacation, for very few shops grant vacations. But the need is there in men's minds and they take vacations. Usually they leave their job, loaf a week or two, go visit some relatives and come back and get another



FIGURE 14. A TYPICAL REST ROOM FOR GIRLS.

job, either with a competitor or possibly in the same shop, in which case they explain their absence on the ground that, "Uncle Tom was sick and I had to go in a hurry," or some such equally inane excuse. If the man is needed, the employment manager accepts the excuse and takes him back. Such practice is common and it seems incredible that employers do not respond to it and grant vacations in a regular way.

Vacations in general seem to be a prerogative of the office. There seems to be a theory that it is not so very important if the office work is not kept right up to the mark, or else a theory that office people can so organize their work that

by working a little harder they can catch up with their work, or by all working a little harder they can do enough more work than usual so that some can stay out. However, if vacations were solely for the purpose of rest, there would be but little excuse for them.

The greatest value of a vacation lies in the opportunity to get out of ruts. Most of us inherit the ruts of the traditions of our trades or professions, but there is another way to get

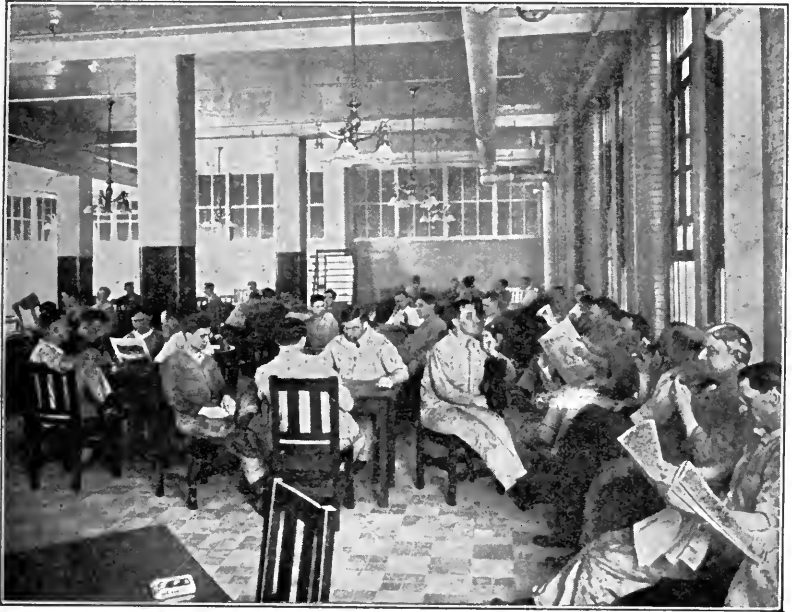


FIGURE 15. A GOOD EXAMPLE OF A MEN'S SMOKING ROOM.

out of these besides throwing up the job, and that is to go off for a ten days' or two weeks' vacation, forget everything about the job, and get utterly tired out in a new way and ready to start back on the job with a new idea of our relations to other people.

Another reason for a vacation is that it gives both the man and his superiors a chance to discover something as to the former's value to the concern. It may demonstrate that he needs to be there every day to keep his work going, which indicates that he needs to have it more thoroughly organized.

On the other hand it may be demonstrated that his being away for a short time does not affect his work at all, from which some short-sighted men may conclude that he is not needed, but which will impress the long-headed general manager as indicative that his work is well organized, and that the man is not afraid to go away and leave it in the hands of subordinates. If the general manager is the sort of man who will hire a subordinate, squeeze all he knows from him, get him to train an assistant and then fire him to save money, the whole force should know it at once and seek employment elsewhere. It is not, however, fair to meet such treatment by neglecting to break in an understudy, or by failing to make complete reports such that others could take up the work in case of emergency. Two wrongs never make a right, and the latter action is at least as reprehensible as the former.

Whether vacations are necessary in the shop is not altogether clear. If the labor turnover in the shop were as low as it is in the office, and there may be such places, then there would be good reason to offer vacations with pay. As a matter of observation, however, the office turnover may almost always be depended on to be only about one-fourth as great as in the shop. If the ratio is less it is because the shop is well conducted and men like to stay there, for office turnover varies much less than that in the shop. Shops in which men will stay a year are rare, but offices in which they do not stay over two years are even rarer. If men who come to work in the shop could be expected to stay at least two years, there would probably be an entirely different feeling about vacations. As it is men get their vacations, but they get them between jobs. In order to get a labor turnover as low as 100 per cent it is necessary that a considerable fraction of the employees have more than two different jobs in the course of one calendar year, for quite a number will stay along year after year, no matter how good reasons are given them for leaving. The average newcomer in a 100 per cent shop cannot be expected to stay more than about three months. Under the circumstances, and seeing that he is taking about four vacations a year, it is no wonder he is not offered vacations at the company's expense.

We must, however, give some consideration to what will happen if we are successful in cutting down labor turnover to the point which sometime we all hope to reach. When men only leave for good reasons, through necessity or because the firm they are with cannot offer them the advancement which they can demand, there will not be these between-jobs vacations, but there will be at least as great a need as ever for vacations so far as the individual employees are concerned. A few shops have met this need by closing down for a week or so during the very hot weather. Then every one who is not needed to paint and clean and move machinery goes to the seashore or mountains, and in some way gets a little different view of life, and comes back tired out physically but with a better feeling than ever toward the company. This has the drawback of inflexibility, the loss of production from idle machinery, and it is entirely impossible in lines of manufacture which require continuous operation. A fair test of this kind of vacation occurred at the time of the heatless days during the winter of 1918, when many shops lost very heavily through inability to keep production going. Inasmuch as most of the continuous industries are dependent on some kind of heat treatment, that shutdown affected them to a very large extent, but probably no more so than an intentional vacation would have done.

The greatest disadvantage of such a system from the employee's standpoint is that every one goes at the same time. But if the father's vacation comes in early July and his son's in August, the wife will either get two vacations or else father and son will throw up their jobs and take their vacations when they want them, and trust to luck to get their old jobs back again. If, however, the shop has an established custom of shutting down at a given period so that all who work there know when the vacation comes, perhaps all the family may get jobs in the one shop. It simply comes down to the elementary but unheard-of principle that working for a firm is in itself a kind of contract, the terms of which should be known to both parties before they begin and which should not be capable of change without the agreement of both.

Many shops encourage recreation as a partial substitute

for vacations. For instance, if there is a vacant field near the shop large enough for a diamond, there will surely be baseball, even if a daily collection has to be taken to pay for broken windows. By and by there develops a team that thinks itself capable of making a showing against the teams of another shop. If it is a shade weak in its pitching staff there begins to be a mysterious flow to the employment department of men who have been bush leaguers or well-known amateurs. The employment department is not concerned with an applicant's minor failings, and so soon one of them gets a job and then there is a challenge to some other shop. A game is played, and whichever wins, the management begins to sit up and take notice by bragging about the team or bragging about the team they are going to have next year. If there is a real baseball fan in the management, which is almost a certainty, there soon comes an appropriation for uniforms and for a field with backstops and an infield like the manager's front lawn, and bleachers and dugouts as well as dressing-rooms and shower baths. Then of course a team on which so much depends cannot possibly do its best if it cannot practice and even with the daylight saving plan in force it cannot practice and get home at the same time the rest of the shop does, so it gets out, with full pay, at four o'clock every afternoon. Then there has to be a number of rooters, umpires, and coaches and a second team and a lot of alternates on the field every afternoon, say somewhere between fifty and a hundred people all helping win the pennant. Next comes the need of a first baseman, and there is a fine chap that can be had, but he does not know anything about the business, so the works manager says he will find him something to do, if the employment manager takes him on, so he is hired and forgotten all about except at practice time and games when he appears from some place or other. Then some one discovers that the rival team is recruiting in the same way and a yell of "professionalism" goes up, and the big game reduces itself to a fight between the professionals of both sides and the management says that they never will do anything of the kind again, and they do not until the next spring.

This is the history of hundreds of shop ball teams. There

are two alternatives, one to hire men outright to play baseball and never expect them in the shop nor allow them there, the other to have a purely amateur team. The last is ideal, but like many other ideals not at all easy to accomplish. Attempts to form ball teams strictly within the shop do not work out because a team made up of the best players is almost certain to contain some professionals. They are legitimately members of the force, having been hired purely to work and not with any thought of playing ball. The mischief seems to be done as soon as the management takes hold in a constructive manner. If it holds off and only tells the ball team what it cannot do in the name of the company there is a better chance of satisfaction, though not much chance of a winning team. Just as surely as the company takes any part in the direction of the team it will have to take it all and it might as well have a professional team and charge the cost up to the amusement of the management.

None of the other sports that are indulged in by shops present these difficulties. Tennis presents only the cost of the courts, which may run as high as \$500 each if they are made for experts, and nowadays there are a few experts almost everywhere. Tennis is not, however, for the multitude. It is a game which finds more favor with office men than with the shop. Football does not seem to be in great favor partly because there is not a professional flavor to it, and largely because it is played when the sun is setting early and there is no chance for practice except on company time. Furthermore by the time the football season is on the management is too much disgusted with sports on company time to consider taking on another.

In the winter basketball claims a good many, especially if there is some place where a little practicing can be done during the noon hour. That brings out men who wonder how it is possible for the players to make so many tries for the basket and miss, and so they shoot a few and with gamblers' luck make them, and then they are in the game for life like the golfer who hits the ball on the nose the first time. Basketball has the advantage that it is most interesting when played between departments, and the teams are fairly

matched; it does not require practice on company time, the equipment is inexpensive and quite a number get a chance to play in an evening. It is a purely amateur sport and one that has enough action to keep the audience on their feet half the time. Handball has a few devotees, but not enough so that many courts are built; hockey hardly needs the backing of a company and yachting, rowing, etc., are really not often company sports, but since they are usually clean, there is not much objection to the various organizations or clubs adopting the company name.

The other amusements which seem to be creeping into the limelight are theatricals and festivals known by various local names. The latter appear to be the outgrowth of picnics. At first the shop shut down for a day and all hands went to some grove with basket dinners; there were swings, dancing, bowling, soft drinks and popcorn, and then boat races, tub races and possibly a tug of war between the married and single men, and also races of various and not too serious a nature. From that has developed a sort of stay-at-home picnic on the company grounds, if there is room enough, in which there is a distinct separation between entertainers and entertained, and spontaneity is omitted. There is a parade of ancients and horrors, with a prize awarded the most bizarre outfit, and a series of acts of almost a vaudeville nature, participated in by volunteers and always including a clown band and various thrilling but fake acts. The participants always have a good time and the audience seems to enjoy it very well. If, as is often advertised, it is a long afternoon full of surprises, the audience may get tired of it and walk off in the middle of the performance, but if the length is tempered with mercy so that the audience does not get to making comparisons it passes for a success.

These carnivals cost a great deal of money, but they give a great deal of advertising. They do not necessarily sell goods directly but they keep the firm's name in the foreground. They also act as advertisements for help of the most effective kind. Whenever the flow of applicants into the employment departments lags it is a good time to have a parade or some other outdoor activity to which all the men in the neighboring shops



can come. Many of them will be around in the next two or three days to see the employment department. They are not quite so efficient as the piper, but they act on much the same principle. In fact, the wives have a great deal to do with it. They go and they come home full of enthusiasm over the shop, and tease their husbands to go get a job in some live place like the So-and-So Company where they have a jazz band and do every sort of thing to amuse their help and their wives and children.

Then there are the orchestra or the brass band and the minstrel show and the amateur theatricals into which they lead. An orchestra naturally grows out of the companionship of three or four men who discover that each plays some instrument. They get together for their own pleasure at each other's houses until the great idea strikes them that they are pretty good. Then they play in public, perhaps give a modest concert or play to the employees during the noon hour, or in some other way launch themselves before the public and the management. They do well and then the management makes the fatal step of admitting it and encouraging them to add to their number and give a series of concerts.

About this stage comes the question of union regulations. If there is to be a band it must, in most eastern communities, be a union band, but if the shop is an open one it may object to the presence of a union band among its members though it would never think of inquiring or objecting if the individual members played in different union bands evenings and holidays. After the band or orchestra is nicely going there is certain to be some one with a liking for amateur theatricals who suggests a modest little entertainment for the celebration of some anniversary; it is put on and is so nearly a professional performance that it has to be repeated. From that the next stage, with the support and financial backing of the management, is a show given in a hall to which admission is charged and the profits accrue to the most convenient charity, or for the benefit of the pensioners of the shop. This first show may net a slight profit, but the standard is rapidly rising and the performance is so nearly professional that the next one must be wholly so. As with baseball for six months preced-

ing the next entertainment there is a steady flow of professional and semi-professional men and women into the employment office. The cost department begins to keep tabs on the lost time incident to rehearsals, a theater is hired, professional dressers are employed to help in the make-up, and everything is done on a larger scale than ever. The house is sold out to capacity but when the bills are all in, instead of the favorite charity receiving a substantial check there is a deficit of some thousands of dollars.

The conclusions which the reader may draw from all this are likely to be that when professionalism and the management begin to come in, the good of all these recreations goes out. Just for a moment let us think, if we can, of any reason why the management should interest itself in the entertainment of its employees. They are not likely to lack entertainment. Since the advent of the movies it is possible for a few cents to get all the thrills that one can absorb, and it is a very small community that does not offer enough so that a different film can be seen every night. There is no need of seeing company baseball when it is just as easy and only a trifle more expensive to see professional ball that is of interest to everybody. There is no need for company dances, because there is every opportunity for those who want to dance to do so elsewhere, and so far as shows are concerned better vaudeville than the shop can offer can be had in any city of 50,000 inhabitants.

Amateur entertainments are of value from a social standpoint because of the personality of those taking part. As soon as the makeup and acting are so good that the actor's own friends do not know him, then this personal side vanishes and it becomes simply an entertainment to which many people go in duty bound but who would much prefer having spent that particular evening elsewhere. If it can be kept amateur, given in the shop in some room cleared for the purpose, and followed by a dance and a buffet lunch, there will be the gain of better social understanding and improved acquaintance. If to this can be added the presence of the leading members of the management, about every good result that can come from plant entertainment will be attained.

After all, however, what the management wants to bring about through all these things is not to give entertainment to their employees, but to use the entertainment to bring about a better understanding between their employees and themselves. Business hours give no opportunity, and it is only through entertainments of this kind in which people of all parts of the organization forget their rank, and all come to a common level of companionship, that the chance comes for the management to prove to their employees that they are all of the same common clay. If they encourage such meetings and then stay away themselves they lose almost the whole benefit which might come from it.

Besides all these forms of recreation there is still another which should receive consideration. The author refers to gardens. During the war nearly all who could had a garden, but now that the war is over are they worth keeping up? Do they pay? We must first of all admit that if men could work the same amount of overtime in the shop that they spend in their gardens they would refuse to keep it up, unless they were paid a great deal more than they make out of their gardens. Or to put it another way, if they had to pay as much for their vegetables as they would cost if they had to pay shop rates for the labor, they would think they were robbed, and they would be right. There may be exceptional market gardeners who would make more money in that business but who like to work in a shop, but they are few and far between and they are only the exception that proves the rule. So it may be accepted that a small garden is not a money making venture. But we also must admit that every shop has men and women who like to work in a garden just as others like to tinker over a motor boat. For this reason gardens should really, except as a war measure, be classed as recreation.

Like all other recreational matters gardens cease to function if they are not left pretty freely to the gardeners. The company may contribute quite a bit to their maintenance, and probably will, but it must not be too visible. If there is a suitable plot of land accessible and belonging to the company, there is pretty sure to be a request for its use. In fact, it seems to be accepted by both employer and employee that

such land should be contributed for this use. The firm can well afford to do it, if for no other reason than that it stabilizes the labor turnover among those who take up the land. It is not unusual to find that the labor turnover among gardeners is only one or two per cent of that among the general run of help. There seems to be something about a garden that makes a man want to watch it grow.

Of course only a small fraction of the employees of any shop want any one form of recreation. There will be more gardeners than tennis players and fewer than there are baseball fans. If 10 per cent of the male forces want gardens, it is about normal; if more want them, there is probably an economic force back of it. This 10 per cent will go at their gardens in very haphazard fashion, unless there is some leadership. One will plant beet seeds six inches deep and another will put beans on the surface, but if the shop management sees this inefficiency and attempts to eliminate it more harm than good will be the result, for then the men will lay down on the company and blame it for any lack of rain or sunlight. If, however, the company keeps its hands off, but suggests to a few of the gardeners that organization is a good thing, then after they have blundered through a season, they will likely get together and form an organization that will buy fertilizer by the carload and seed, tools, and everything else at wholesale. They will learn that it is better to agree with the rest for the sake of the money saving and this for many will be their first lesson in coöperation. Then they will get some one of their number, or some man from a nearby agricultural college or a farm bureau, to give them lectures all through the winter on planting and cultivating and spraying, etc. They may come to the company for credit, though it is better if they contribute toward the seed fund and the fertilizer fund through the winter. It may be, of course, that the purchasing agent by writing on the company letter-head can get them better prices on their purchases than they can get themselves. Experience seems to indicate, however, that the less dealings of a financial nature they have with the company they work for the larger number there are that will take up gardens and go through with it. It is even better that they

should go to some one else to get the land plowed and harrowed, even though the firm's horses are eating their heads off in the barn.

There is more danger that too large gardens will be given and planted than too small. When the land is freshly plowed and harrowed it is very easy to put in seed, but when July comes and weeds grow several times as fast as the vegetables, and when the sun is hot, and the garden gets large, then there is danger that men will discover they undertook too much and will neglect their work and let the weeds win. From 3000 to 4000 square feet is enough for any one man to try to cultivate alone, if he is going to raise the usual run of vegetables for his own table. If he plants potatoes he can usually handle twice the area. If he puts in sweet corn he can also easily handle more, but he will raise more than one family can eat. It is unusually better for each one to raise all the different vegetables he wants rather than for each to specialize and then exchange. Since gardens are a form of recreation there is need of as much variety as possible, so even though it is more efficient for men to specialize it does not follow that the most efficient garden in point of production is the most effective.

The best location is, of course, one which is nearby the men's homes. If there are city gardens near a man's house he should not be the subject of too much pressure to join with the others in gardens near the shop. There is too much of this kind of pressure, whether it is brought in play to have gardens or to play baseball. It is a great temptation for baseball cranks, for example, to decry the selfishness of men who prefer to do their duty to their wives and children to playing ball. These men have a right to spend their leisure hours in the kind of recreation that appeals to them and they ought to be praised for sacrificing the kind of fun they enjoyed before they were married for the kind that is of profit and interest to their families.

There is undoubtedly a great gain from men having their gardens together. There is the incentive of rivalry and of pride in a well-kept garden, but it can be overdone. The man with a little garden in his own back yard may find just the same or

greater incentive in the admiration of his family or his neighbors, and he may take away prizes from others in the general gardens. It is fairly safe to say that gardens so situated that they add a mile to the trip to and from the shop are not successful as vegetable gardens. They are all right for potatoes, since some friend with a car will bring the crop home, but no one wants to tramp a mile for a handful of lettuce, a bunch of beets, or a peck of string beans.

As a whole, these gardens in the hands of amateurs form an inexpensive form of recreation which appeals to a substantial percentage of workers. They help to cut down labor turnover by giving the men an additional tie to the shop, and this is legitimate because it makes it profitable to stay, in distinction from things which make it a loss to leave.

## CHAPTER XXXII

### FINANCIAL RELATIONS AND LABOR TURNOVER

**T**HERE are a multitude of reasons why men leave one shop to go to another. Some are legitimate, some imaginary, and some foolish, but the most prominent ones center around the question of wages and hours. Workmen have nothing to sell except their services. Custom has wedded us to the thought that wages are compensation for time spent, which is a mischievous idea for there are few jobs in which wages are paid for bodily presence only. Most wages are paid to those who actually carry on production, or to those who help to keep it going. The real unit therefore is the unit of production, and is not convertible to units of time, even though we pretend to do so. The daily unit is necessary because men must recuperate once a day. If it were possible to do otherwise we would have men who would want to work twenty-four hours and then rest forty-eight. It is also cut into weekly units because of the sensible and scriptural injunction which affects the majority of male workers. The fact still remains that what we are concerned about is not tonnage per hour but tonnage per day or per week.

The men who accomplish things are the men whose minds are on their jobs all the time. Such men overhear a chance remark at a ball game which sets them thinking about something which aids production. They are called absent-minded, which means that their minds are engaged in some better occupation than that of the friends who criticize them. Large production is entitled to large rewards regardless of the length of time consumed. One man may have a slow but certain gait which he can keep up for long hours, his home surroundings may be such that he is happier in the shop than at home.

Why should he not be paid for what he produces and allowed to work as long as he desires? Another man works more rapidly, perhaps he lets his brain help his hands, and he does an equally large amount of work, but he is completely exhausted at the end of seven hours. Why should he be induced to spread this work over ten hours? Why not pay him for what he accomplishes and then let him stop? Some men want leisure for an avocation, but many would be willing to speed up, for the sake of an extra hour or two of their own.

Much has been said about the non-financial rewards of labor but a study of the reasons which men give for leaving any given shop will almost certainly show that the prospect of earning more money is the largest factor. But is this labor turnover due to higher wages in other shops to be taken as a reliable index of the state of wages in our own? Probably it is, if at the same time there is considered the number of the men who come back from these other shops wiser than when they went away. If men go and do not come back, it generally means that they have found a better job. If a considerable number of men come back after having gone out looking for higher wages, and if they come back without further financial inducements, then it is safe to say that wages are high enough. This does not mean that everything about the concern is right. It simply means that the employees realize their need for money well enough so they are not looking for changes on that one account.

While methods of paying for work are not of the importance that we have tried to make them out to be in the past, it is nevertheless well to briefly consider them. The different methods seem to be variations of: (1) hourly rate; (2) yearly salary; (3) premium; (4) task and bonus; (5) piece work.

The hourly rate is the most pernicious of all and the least productive of friendly feelings between employer and employee. It is also by far the most used. It implies, if it does not prove, that the employer confesses that he does not know how much work a man ought to do, but prefers to take a chance, rather than to set a definite task or to agree to a definite price. In other words he bets that his employees know less about it than he does.



A yearly salary is justifiable only when the employee is engaged in originating something—ideas, usually. A man who is really on the job twenty-four hours a day deserves a salary and any man who would work at the same job without a salary if he could, deserves one. In fact, in any case where the worker has his heart in his work he should have a salary. It is, however, a most unbusiness-like thing to accept a salary, for the recipient throws away one of the greatest incentives of his growth when he accepts it. When a man is working at piece rates his income automatically increases as he grows more expert and capable, whether it is feeding punch presses or selling them. But when he accepts a salary he places himself where his employer can only guess his value by reason of the offers which he gets to go elsewhere. He no longer has a gage by which to discover whether he is growing or shrinking, and he becomes the victim of opinion, which is formed by impressions which the employer receives from fellow workers and others.

The premium system confesses immediately to a doubt as to what a workman can or should do. It virtually says to the man, "You know that I am human and that I would not let you earn over \$5 a day at piece rates, but here is a scheme by which I will only take away from you one-half of what you earn in excess of your daily rate." After a while workmen come to see it in this light, therefore its use is not widespread.

Task and bonus recognizes the fact that we have talked hourly rates so long that everybody makes comparisons by that method. Therefore it pays men by the hour, but if they do more than a given "stent" it pays them an extra bonus which may or may not be in proportion to production. As a half-way measure toward the right thing both premium and task and bonus systems have great merit.

Piece work has been abused so much and in such an open spirit of meanness, that while it has all the virtues that we can require, it is very hard to reëstablish in many places which need it. Its two faults are, or have been, the setting of rates while in complete ignorance of how much work could be done in a day or a year, and cutting of rates when this ignorance proved costly. Really the first was the only fault, the second came through self-preservation.

A piece rate based on past performance under an hourly rate has no scientific value. That method of setting rates has made the stop watch something despised by workmen, and a laughing stock for the few who have endeavored to get at a true rate. Almost every repetitive job in a manufacturing establishment can be divided into the actual work done, which it is easy to calculate from the drawing, and the time spent and wasted in looking for the tools, rigging, etc., with which to do it, and in making necessary adjustments. Whenever piecework rates are set and the workmen have a true belief that the firm will maintain them, no matter how much they may earn, there is an immediate demand for tools and equipment which will allow them to make big money. It will surprise almost any shop superintendent to take any single job in his shop and discover how large a proportion of the time of his so-called producers is spent in hunting for things which should be at his elbow. One shop which has a most excellent name for efficiency discovered that its 20 gangs of erectors had only one tap wrench of a size which all needed. At least one man was spending all his time hunting for or waiting for that wrench.

Successful use of piece rates can only be expected when the rates are set after definite experiment has shown how long it actually takes to do the operation under consideration, the wasted time reduced to a reasonable and computable limit and assurance given and lived up to that rate once set will be maintained, no matter if the workman in question makes more than his boss. It is very easy to compute how long it takes to drill a given hole at a certain number of revolutions per minute and a definite feed. It is easy to compute the time required to plane a certain area with a definite overrun and a known cutting and return speed and feed. It is easy to find out how long it takes to put the piece to be drilled in a jig and take it out again, or how long it takes to put the part to be planed in a holder and level it up, but it is impossible to figure how long it will take John Jones to find a dozen castings to be drilled, find a helper to take them to his machine and then hunt up the foreman and find out what size hole is needed, where, and how deep. That is, piece rates are only applicable

to such cases as are definitely and accurately studied, in other words to cases where the employer can give his subordinate correct instructions and know that they can be followed out. When the worker is an expert who knows more about the job than the boss, when scientific accuracy is not present, then day rates or some of the compromise methods are best.

It is, however, an admission of ignorance or incompetence on the part of the management to be in such a position that routine work cannot be put on a satisfactory piece-rate basis. It has been necessary in almost every place where scientific piece rates have been installed to take away from the foremen the function of leadership, and reduce him to the standing of a disciplinarian. The great majority of present-day foremen do not know how to originate ways of doing work adaptable to the machinery and tools available for the job. They can only do what they did in "the old shop." It has been found necessary to make up a planning department for which old foremen have seldom been found suited. In fact, it seems as though the problem of what to do with the foremen who are obstructing production in our shops to-day is going to be one of the great problems which must be solved before the simple and rational straight piece rate is a complete success.

As a method of distributing wages the time-honored pay envelope and the check are running a race, with the check in favor in large establishments. The proportionate expense of distributing each week's pay envelopes is lower in a large establishment than in a small, but the aggregate is large enough to draw attention to it as a cost which can be reduced. A check can be written in less time than is required to put money in an envelope, and checks can be verified if they do not add up to the correct total more easily than envelopes can be emptied and the money counted. Opposed to the question of cost is put the feeling of the workmen, which is very naturally in favor of the pay envelope and against the check. Comparatively few workmen have accounts in banks which handle checks. None of them wish to deposit the whole amount in a savings bank, and the savings bank will seldom cash a check for the sake of the dollar or two deposit which workmen may make. Again they have only the noon hour in

which to go to the bank and get their money. They find a crowd there and are lucky to get away in time to get back to work on time, to say nothing of losing their lunch. They look on it as a scheme by which the company dodges the state law compelling it to pay off on company time. They lose on an average at least half an hour a week standing in line to get actual money to spend, which is not merely loss of time but is uncomfortable. Just what effect this has on labor turnover is unknown. It may be the one deciding reason why a man leaves, the last straw so to speak, but it is not at all likely to be a fundamental one and among men who do leave shops where checks are used it is practically never given as the reason for leaving.

There is a method of cashing checks that is likely to be an unknown one by the time this book is printed and that is at the saloons. Whether it will be possible to pay in checks when the saloons are closed is a question which can be answered only when they are out of business. It was undoubtedly profitable for the saloons to cash checks, as a man with a pocket full of money is much more likely to spend it freely than a man with only a little. If the savings banks could only get away from traditional hours, and other limitations, and consent to make money when there is money to be made they might also assist in making men thrifty. The same persuasive powers that will make a man set up the drinks for his friends will at least increase the amount of his savings. A bank which would cash checks after working hours could easily make it a condition that a deposit of at least \$1.00 per week should be made without stopping the flow of checks this way. Many banks are open one evening a week for deposits, but they will usually refuse to cash checks or do anything else that can be claimed as obliging. If saloons had run on bank hours and had been as disobliging there would have been no prohibition amendment for none would have been needed.

A reasonably low labor turnover can only be obtained where it is more pleasant for the employees to stay than to leave. They may not leave, and usually do not, until the disagreeable features of a job overbalance the agreeable ones. It may be the size of the lockers, it may be the dust in a shop,

or the dampness of the floors, or it may be one of a thousand little annoyances no one of which is an excuse for moving, but which altogether make it seem that the next job that is offered is better. The method of distributing pay envelopes, or checks, if those are used, is another one of these small items which are so important. When the shop is small and the owner is superintendent, manager, and treasurer all in one, then it is natural for him to put up the payroll in the envelopes and then distribute them himself. When the shop grows, he hires a bookkeeper and turns the payroll over to him. After a while the bookkeeper finds the tramp around the shop irksome, he has not the interest of the owner and he sees the job only as a long, unnecessary tramp. He then has a little window cut through the office wall next to a passageway through which the men can go as they leave the shop. He can then sit on a stool and pass out the envelopes. If the men file by in numerical or alphabetical order he can arrange his envelopes accordingly and speed the line past the window at a rapid pace.

This is efficient, if all we look at is efficiency of distribution, but if we consider the effect in the shop it may be quite otherwise. When the proprietor went out in the shop with his handful of envelopes he called every one by name, and if any one stopped to ask a question he answered it. If there is a time when two people can get close together it is when they eat together, or when one settles his obligations to the other. The psychological time in the shop for unifying the organization is payday, but it cannot be done through a hole in the wall which discloses nothing but the cashier's necktie. Probably very few men would stay on a job a longer or a shorter time because of the way the pay envelope is handed out, but the management can get much nearer to a correct understanding of the feeling in the shop through a cashier or a paymaster who each payday goes around the shop.

Unfortunately there are many managers who are so puffed up with their success that they claim that they reached their present positions alone and without help. Their acquaintances, however, could tell a different story. Such men are like ostriches who run and hide their heads in the sand to

avoid disaster. They bury themselves in their offices away from the friends who would give them the most help. When the paymaster reports black looks and sullen acceptance of pay envelopes it is certain that production will not long be maintained. Long before that stage is reached there should have been a change. A shop full of beaten men is not profitable. A shop which is not making profit enough to grant its men all the rights to pursue happiness that other shops do is either not getting enough for its goods or it is a superfluous shop and should be wiped out. It is worth real money to the management to have information as to the feeling in the shop. All the foremen and superintendents, and all the paid spies and detectives in the world cannot find out as much in their way as will come freely to the cashier who circulates through the shop. In the first place he represents the management from a different angle than the foreman. Furthermore, the cashier is almost always closer to the management than the foreman and the men feel it. The foreman may be friendly, but not officially, for officially they are enemies, and so is the superintendent.

If the paymaster is to be a diplomatic envoy from the management he must look the part. He must be a man's man, and look and act as though he were in the confidence of the head office, and he cannot do that long unless he really is. He should be a man who remembers names. He should know whom to call Mike and whom to call Mr. Smith. He should remember who has had a baby and who has buried a relative. He should not stop to chat, but he should have a cheery word for as many men as possible if nothing more than a "Hello." He should be quick and active so that men will not be kept waiting, and yet he should not appear nervous and hurried.

The method of paying, however, is but a small item connected with the financial relation of employer and employee. Of course a purely business relation with employees calls for the payment to them of their wages when earned, and indifference as to what use they make of their money. But if the firm has facilities which it can share with its employees, without expense to itself, it should do so for it will thus obtain the good will of its men. Such things as allowing employees

to use vacant land for gardens, using their purchasing power to secure low rates on groceries, and ability to build houses cheaply, if extended to employees, help make the firm more friendly in the eyes of workmen, and undoubtedly help to hold men.

Has a firm better facilities for loaning money than men have for obtaining it themselves? The answer must be "Yes," and for a number of reasons: one that the firm can borrow money at lower rates than the men, another that it has a better opportunity to know who wants money for a legitimate purpose, again because it is borrowing money from its employees all the time without interest. On the other hand, it must be admitted that to add to the relation of employer and employee that of borrower and lender has its elements of temptation to abuse. This may be on either side. If a workman is so heavily in debt to his employer that he does not dare throw up his job, there is the temptation to at least defer increases in pay which might be otherwise forthcoming. However, this is no worse than the temptation which comes to the employer who discovers, through also being a director in a bank, that some subordinate is having financial difficulties. It is easily avoided if the placing of loans is done by another department than the one which has to do with wage increases.

The second item, that the firm is in a position to know whether or not its employees wish money for legitimate purposes, is true only if the employment department is organized to know all about the men on the payroll. If a man wants to build a house and has anything at all to offer as a first payment, has a job which can be made permanent, and is in good enough health to take out life insurance, he is a fairly safe risk. If the man's need of money grows out of sickness, either his own or of his family, his employer is in much the best position to know whether he is getting adequate medical attention. Many times it is cheaper in the long run for the firm to hire a good specialist than to leave the man to the care of his family physician, and yet the man himself simply could not stand the expense of the specialist, because his credit is not good enough to borrow the money

except at usurious rates. This may seem paternal, but when a man is sick he is more or less of a baby and he welcomes the kind of paternalism that puts him in an independent position.

The loans which are called for range from the "dollar until pay day" to thousands of dollars to build a house. The man who is always a dollar or two short the day before payday is laying the foundation for thriftlessness. He may be of the type that hates to get into debt and who would rather obtain a few dollars from several chums than to go somewhere and borrow ten dollars and feel at peace with the world. Again it must be admitted that the loan sharks greatly discourage men from borrowing in a businesslike way. There are very few places where a man who needs a sum of money under a hundred dollars can get it without paying much above the legal rates for it. The firms which advertise low rates to workingmen usually succeed in making up charges for imaginary services and charge interest in advance so that the real rate is excessive.

How then can employers afford to enter this competition so far as their own men are concerned? And how can they loan money at rates which make the transaction a business one? A great majority of shops pay weekly, but they hold back some money. If, for example, they pay off on Wednesday afternoon they owe their men six and one-half days' pay. The interest on this six and one-half days' pay at six per cent is .39 per cent of one day's pay. If the payroll is \$10,000 a day the money held back is \$65,000 and the interest on it, which is what the men lose, is \$3900 per year. If the company should through loaning money to its employees lose \$3900 per year in bad notes, expenses, etc., it would still break even. A \$10,000 a day payroll just at present means a shop with a little more than 2000 employees; a fund of \$3900 for making small loans in a shop of that size would be ample to supply all legitimate calls for loans. The exception to this is in the matter of real estate and there it is seldom necessary for the firm to advance any money but only to loan its credit by a guarantee of steady employment.

If a firm makes arrangements to advance money to men in this way it is only reverting to the old way, when the owner



was his own cashier and went around with a box of pay envelopes in his hands, distributing the money himself and hearing all the hard-luck stories. Then it was the easiest thing in the world for men to get loans, if there was anything like a reasonable excuse for it, and to-day the same conditions would prevail if the owners could go around and distribute the wages themselves.

There is still a third factor which enters into the financial relations between employer and employee, and that is the question of financial rewards. These may take the form of insurance, bonuses, or profit sharing. There are two distinct and opposing viewpoints regarding such rewards. These depend on the financial status of the person rewarded, his mental attitude toward financial matters, and his tendency to stay in one place. Theoretically, every one who labors effectively is doing some part of his work for the future as well as for the present, for he at least accumulates some experience for future use. But, as a matter of fact, all of us prefer our rewards as we go along.

We also like to think we are running our own affairs and we do not see, for example, that our life insurance is any more the affair of the firm for which we work than is our choice of neckties or the food we eat. There is no doubt, however, but that insurance companies will give lower rates for wholesale business than for retail, especially if payment of premiums is guaranteed by a well-rated firm. Cost of life insurance is made up by adding to the premium due to mortality enough to cover cost of selling the insurance and cost of collecting the premiums and a trifle for disbursing benefits. A casual glance at the report of any insurance company creates the impression that its profits are due to lapsed policies, for there are millions of dollars collected in this way every year from people who are oversold, but as a usual thing it has cost so much to sell it that these few payments do not cover sales cost. If a few hours' work will sell a thousand or ten thousand policies, even if each is small and if there is no cost for collection, it would naturally seem as though the recipients of the policies should be very thankful to have them. The trouble is that very few people really demand life insurance, and most of

that few do not need it, but take it out as a purely business proposition. To have something thrust at us that we do not want, even though it is a bargain, appeals to us no more than the neckties and cigars that our friendly female relatives delight to buy at Christmas time.

The most satisfactory type of group insurance is the kind that comes from mutual effort, usually through so-called mutual benefit associations. These are purely self-governed and voluntary associations in most of the successful cases. Their one outstanding defect is that they seldom grant sufficient insurance, for the usual limit is \$100 with a sick benefit of five to ten dollars per week. This is supposed to cover the cost of a modest funeral preceded by board at home while one is sick. The cost of this insurance is usually in the vicinity of twenty-five cents per month, at which rate such an organization will apparently make a surplus. The word apparently is used advisedly for usually the funds are collected and disbursed on company time, officers work for nothing, company stationery and stenographic service are available and the thousand and one things that cost the independent company money are free. More than that, the service of these mutual benefit associations is taken advantage of by only relatively few of the employees. The men who will come in are the men who stay with the company year in and year out, so a mutual benefit association can hardly be thought of in the light of a means to hold men on the job. This is one of the strong talking points of the advocates of group insurance. They point to the larger policies which they issue, the greater stability of their companies, and the fact that their policies cover every one. They claim great stabilizing value and say very little about the increased premiums. If the claims for stabilization can be established it is very likely profitable, as the true cost of changing help is seldom if ever acknowledged by employers.

There seems to be no way of proving that any definite reduction in flow of labor through the shop can be expected from issuing insurance policies. From the employer's point of view it is a present, which costs the company little but is expected to look large. Anything offered by employers except hard

cash is apt to be looked on for a time with suspicion. They ask why it is offered and the only reason they can see is that their employer thinks it will pay. If it pays him they do not expect that it will pay them. That, however, is not in accord with experience. Of course, this is the one most prominent difficulty between employee and employer—they cannot see a mutual profit in sticking together. If group insurance brings them together it pays, if not it misses one point of advantage. If it brings them together it does so because the insurance seems to the workers like an addition to their pay. It is usually too far in the future to mean much of an addition, in fact it means very little, because those who are already carrying insurance do not drop it on account of going to work where more is offered. They do not expect to stay there. Very few people go to a new shop with any idea of a permanent job. They stay only by accident, not by intent, until by and by a few get so they are afraid to go out looking for a job. It is doubtful if any kind of insurance, mutual benefit or otherwise, will make any difference in this attitude of this class of employees.

When a man is ready to throw up a job it is usually because the new job pays more. In such cases it is almost impossible for him to assign a definite value to his insurance policy. If the new company to which he is going makes a similar provision it has no value at all. If there is a value to the company it is only because it is the first in the field in the community. The second concern cuts the value in half and so it goes until the value is gone and the cost is a liability. In other words, there is serious danger that group insurance may succeed so well as to become a mere settled charge against doing business at all. Compulsory insurance would put all employees on an equal footing and would simply be another change in business, which it would seem should be a charge either on the community as a whole or on the individual.

Discussion of the question of making this a charge on the community as a whole also brings up the question of compulsory health insurance, as the principles of both are the same. The demand for both so far seems to be traceable to people who are interested in a sociological way, or possibly to

those who may profit from it financially. The argument is that it is a good thing for any one to carry life and health insurance as proved by the large number who do; therefore, it is a good thing for all. Since it costs such great sums to sell the insurance which is carried, it ought to cost much less to carry insurance on everybody than on the few. Whether this is true or not we can only speculate. One of the reasons for the present high cost of selling insurance is the intense rivalry for the business of the few who have both money and good health. The two unfortunately do not always go together. If the great general public is taken in, the collection of premiums will be in the hands of the tax collector and the cost will not likely be charged to the insurance department, but the average general health and longevity of the insured will undoubtedly change quite markedly. To be sure, it will bring in many who cannot now get insurance at normal rates and who need it, and many who do need it but are not persuaded of their need. In fact, it is doubtful if they will be persuaded even by law, which fact might possibly wipe the plan off the statute books soon after it was put in effect. It seems to be a safe thing to say that we cannot expect any law to stay on the statute books that is not subscribed to willingly by a majority of the people affected by it, as witness the shifting back and forth of cities from license to no license under the local option laws. Insurance is so logically a good thing that it should and would cost very little to sell it except for the keen competition of rival companies for a small number of large accounts.

Profit sharing is another deferred payment which has suffered from wrong use of the word. A guaranteed profit sharing, distributed at a certain date and for a fixed amount, is nothing but an increase in pay. True profit sharing shares losses also. So far as records show there has been little or no successful true profit sharing which was not combined with so much paternalism and good management that its success could not be proved to be due to the profit sharing feature of the business. To go clear to the root of the matter we have to ask ourselves what proportion of people really want to be in business for themselves after they learn what the penalties

are and what worries and hardships are entailed. They may be compared with the pioneer who is either compelled by his nature to get far away from the haunts of men, or compelled by his necessities to get far from his creditors. Many a man is in business who has often wished he could get out whole. He only stays in after he can get out because he cannot sell for what he thinks the business is worth.

Probably nine-tenths of the male members of the human race want only enough to eat and wear, and a warm corner in which to sleep. We do not want responsibility; we care more for tenure of job than for the privilege of leading others. We will, and do, sell our share of the future profits of the firm for which we work for our daily stipend, paid with clocklike regularity and spent at least as regularly. We sell our birthright for a mess of pottage and we are not ashamed. Why try to share profits with those who will not take a chance themselves? If an employee wants to get into the firm, why not open the door a crack and see if he widens the crack? It is not necessary to invite everybody in at once.

Who contributes to profits? Surely not everybody, because then profits would be enormous. It is only those who do more work than they are paid for doing, who really put the business on a paying basis. No system of cost keeping is sure to spot those who pay or those who do not. One man may make a business pay by accomplishing a great deal of work himself, another by keeping out of the way while others work as he has planned.

## CHAPTER XXXIII

### NON-FINANCIAL REASONS FOR LABOR TURNOVER

ONLY a very few years ago a man who declined a job because it was too heavy, too dusty, too wet, or even too dangerous was accused of being lazy. To-day it is well understood that such jobs are worth more money than the light, clean, dry, safe jobs and still there are few acceptable takers. It is not laziness that has advanced these jobs to a higher price, it is prudence on the part of workers and mental inertia on the part of employers.

But even apart and aside from a spirit of fair play and humane considerations, it does not pay to have such work to offer. It should be eliminated as inefficient. In fact a job so heavy that men accept it with reluctance, is heavy enough to pay for putting in some mechanical lift. Jobs which involve working in a dust-laden atmosphere are also bad. Shop dusts do not carry the bacteria that street dusts do, but they carry sharp cutting particles, especially if there is emery or other abrasive in the air. The worst trouble with dust is that there is no gage by which the amount can be tested. Superintendents will declare that rooms are not unduly dusty which seem to outsiders to be very much so. No one can prove, however, that they are wrong. State laws often provide that all dust due to manufacturing operations be removed, but such laws cannot be enforced except by the arbitrary will of the inspector, because he has no way of scientifically determining whether the law is complied with or not. It cannot be literally complied with because there is no such thing as a dustless room. The nearest approach is that of the plenum system of ventilation where the same air is used over and over again, being washed and otherwise purified as it is circulated. How-

ever, some men and a great many women simply cannot work under such conditions because of the excess air pressure.

The whole subject of risks of physical injury, as offset by safety engineering, is worthy of separate and more complete treatment than can be covered when we are thinking about holding men on the job. Men very often change jobs because of a bad accident, not to themselves, but to others. The sight of men who have lost an arm or a hand when doing the same kind of work, has at least a disquieting effect if nothing more. This affects their wives and mothers more than the men themselves, and it is through the influence of women that the most serious effect of accidents is felt. Other things being equal, the shop with the cleanest record will have the fewest men leaving it.

The fact, however, that accidents seldom occur is no consolation to the man who does get hurt. A leg or an arm lost will never grow again. A crushed finger may be a bother and a disfigurement for life. A shop where castings have been occasionally dropped from a travelling crane without hitting any one, has no assurance that the next casting that slips will not kill enough men to make up for all the years of this foolish practice. Luck is a poor mooring. It is sure to change.

True accident prevention is something that must be applied all the time. Building a guard, posting a notice, scolding a man who takes off a guard, do little good. Constant supervision is necessary. What is needed is a department whose sole duty it is to see that guards are used, and that safety practices are followed. This is easy if standard safety practices are formulated. It cannot be done if every one works as he sees fit, because then it becomes a matter of the personal opinion of the inspector, which has little weight in most places. If it is everybody's business it is nobody's business.

Other disagreeable working conditions can also profitably be eliminated. It was once, and is still now a time-honored custom to rebuff men who wanted comfortable surroundings by a sarcastic inquiry as to whether they would not like easy chairs and carpets on the floor. Now we find that it almost pays to have both in some places. There is, however, a great deal of difference between comfort and ease. A man may be

able to do a great deal more work if he can do it in comfort. Some shops were formerly run with much the same idea that the old Puritans had, that if a man was comfortable he must be sinful. The better way is to make the job comfortable and then find men to do the work who appreciate comfort. They will likely appreciate the opportunity to make the extra money that their added production will entitle them to. Of course, if they are expected to take the comfort as part of their pay they will not stay.

This situation is especially true of such conditions as affect men's health. Leaving the individual man out of consideration it is a wasteful thing for all of us for any man to have his working life shortened by disease, and especially by a disease that brings lingering illness. Every one of us has to do some additional work for the sake of such men and to help pay their doctor's bills.

Failure to care for the health of workers on the part of employers is usually through lack of knowledge or attention. For example, in a shop well known as a good place to work, a gang of laborers struck because there were not enough whole rubber boots to go around and they were required to work in a wet ditch. When the matter was sifted down it was found that the stores man had decided how long a pair of rubber boots ought to last and until they had been out of stores that length of time they were to be considered to be perfectly good rubber boots and no amount of actual holes made any difference. Needless to say they got their rubber boots, although even then their foreman was disposed to fire a few of the ring-leaders to make an example of them so that they would not kick again even if they had good grounds for so doing.

Coupled with the working conditions are a number of minor ones connected with sanitation. Most men appreciate good washrooms, toilets, lockers, etc., but there are always a few rowdies in every shop who look on them as signs of effeminacy and who try to abuse them from the start. Many employers have been deterred from doing more in this direction because of this abuse. They would not think of spending the same amount of money on equipment or small tools without keeping it under supervision all the time. If they would



watch their sanitary appliances as closely as they watch the small tools in their tool rooms they would have no more trouble than they do with tools. Once installed and in regular use the vigilance can be slightly relaxed, but not altogether. Such sanitary conditions certainly attract a better class of men and make those of a lower class better. It is true that many men only notice these better surroundings by their absence when they go to other shops, but if that leads them to come back and talk about it, the purpose is served just as well; in fact better for the man who has once made comparisons and found the other shop wanting will not go again except for considerably higher pay.

The greatest influence on labor turnover comes about through the elevation of the morale of the whole shop. A certain type of man which frequents ship yards and construction work is not especially susceptible to better influences, but the great majority of semi-skilled and skilled mechanics are quite sensitive to their surroundings and especially to the people whom they meet. This applies to general cleanliness. The old saying that cleanliness is next to Godliness is evidently much believed. Men who have worked in a clean shop never forget it, and they always have a leaning toward returning to it. Moreover, it costs almost nothing. It takes very little more time to clean up chips every day than once a week, the tonnage is no different. The largest cause of uncleanness in most shops is oil, which is a very expensive loss when considered quite apart from its effect on the workman. It requires many barrels of oil to bring shops to the state of saturation which many exhibit, enough surely to make drip pans an economy.

Another consideration which has an influence on the flow of labor, though quite apart from this last subject, is tenure of job. On a building job no one expects to stay until the job is finished. The first men on the job may be hundreds of miles away when the plastering is being done. No one thinks anything of leaving the job for another one when the chance appears, regardless of the state of the building. Labor turnover, if figured, would be high. But on a job which has the earmarks of permanency there is likely to be a considerable

part of the force which is indispensable and which does stay through thick and thin. The rest of the force, however, is very much inclined to seek other employment whenever anything happens to make them suspect that there is a falling off of business.

Every shop has its "wireless" or underground news service through which the workmen know, and oftentimes truly, all about the incoming business of the company before the president himself hears of it. The presence of this "wireless" system is full evidence that the company has not the habit of taking its employees into its confidence. It would seem much better for the whole organization to know the truth about the state of business than for individuals to get wrong and unjustifiable suspicions. The fact that "wireless" is sometimes right places it higher in the esteem of the shop than the little information which the management so rarely gives out.

Much of so-called welfare work is done for the sake of placing employees in a position where they cannot readily quit their jobs without a loss. The ethics of this is questionable. If the effort is made, however, to put the employee in a position where he gains by staying there can be no question raised. A man with a family which makes social ties, whose children are in school, stands to gain very greatly by certainty of occupation in that particular vicinity. The individual shop realizes that it stands to gain by his continued work, but oftentimes overlooks its share of the common gain if the man continues to work in the same town, in other words, keeps his residence nearby. There are undoubtedly many quiet understandings between firms that they will not hire men who leave each other's shops. This has a tendency to drive workmen out of town. The community suffers, and the suffering is shared among the different shops. Nobody gains anything because any man who suspects that he is the victim of such a conspiracy not only wants to wipe the dust of that town off his shoes, but he also warns everybody that he knows what to expect. Then the superintendents in that place wonder why it is so difficult to get the right kind of men into their shops.

Tenure of job means that every man can be assured of a

square deal, that he will not be discharged out of hand for some trivial thing, and that he will not be made subject to petty annoyances because he has in some way displeased the boss. When shops were considered large if they had 200 employees there was not the trouble that there is now on this score. Then the man who made or lost money in the business was in the office and paid off his men with his own hands. His foremen reflected him in everything they did. Now it is the very rare and exceptional manager who is reflected so far down the line as his foremen. In fact there are literally very few *general* managers. Most men carrying that title have some department of the business which is their hobby. One thinks the sales department makes the profits and keeps that under his finger. Another thinks that the financial end is all important, and his accountants are figure heads because he is his own comptroller. A few think that production is the important thing, and they pretty generally have a good idea of what is going on in the shop and a correspondingly vague idea of the other departments. Very rarely is there a general manager who discovers that the most of his outgoing cash is paid for human service, and that he can well afford to spend a considerable time on that side of the question.

The natural result of this lack of many-sidedness on the part of chief executives is that their influence is little felt among workmen. There have been a few notable exceptions, especially in the steel business, but as a usual thing the foremen are not at all acquainted with their general managers. Their conception of what the management wants comes to them through superintendents, whose sole idea is that they are judged by immediate results, and any failure to show those results will be inexcusable. Consequently there is little time wasted on the man whose record to-day is no better than yesterday's. The system is inexorable and there is no appeal. It is this very thing, a thing of which many otherwise able executives are unaware, that has brought about the extreme and unfortunately antagonistic state between employers and employees. It is what gives us so many executives with the highest of ideals having under them shops where ideals seem to be unknown. These are the very men who appear to be so

charitable to the men who have been ruined by the system practiced in their own shops.

It is doubtful if there is any cure for this except a complete overhauling of shop organizations. There appears to be no place in the future for foremen and superintendents who have been in the habit of taking unfair advantage of individual workmen and have discharged them out of hand. The newer plan of having each foreman limited to discharges from his own department and giving the employment department the right to place the man in another department is only a step, and not altogether a satisfactory one. Foremen can make the shop so unpleasant for men that they are anxious to get away and poison the minds of all their friends against that shop. Foremen will agree among themselves not to take on men who have been sent to the employment department for transfer. The spirit of our shops will have to be entirely changed before the high ideals which are expressed and honestly held by our industrial leaders can be realized. The whole organization will have to think in terms of permanency instead of in terms of to-day's profits.

Still another thing that militates against permanency of organization is the idea so often met that youth wins. An organization of young men has pep and push. It dares to do things at which older men balk. However, an organization of young men is almost always really an organization of men younger than the leading spirit. When one is thirty any man over thirty is a doubtful case. When he is fifty boys of forty-five are a trifle young to be trusted with important matters and when he is seventy the young fellows of sixty hardly ought to be taken on at all. That is, age as treated in many establishments, is relative and not actual.

If we follow the careers of men, big and little, we cannot help noticing that the men who grew old in years without aging in mental grasp, are the men whose early years have been spent in manual labor. If we were to prescribe for a long and useful life, full of satisfaction, we would advise that up to the age of forty a very considerable amount of a man's time should be spent in active, muscle using work. After forty there should be a gradual change to mental effort, so that after

the age of sixty perhaps there would be little physical work but it should all be mental. These young fellows just out of college need to go on with work which will allow them to show the physical prowess which they have shown in college. They cannot afford to become old men before their time. Their jobs are in the shop learning thoroughly the innermost secrets of manufacture, or on the road demonstrating the products of the shop. Later, as the physical urge wears down is time enough for them to come into the office or into administrative duties, which they can then approach with the knowledge of materials and of human nature that they cannot get in any other way than by actual contact.

Shops which get a reputation for dropping men as they approach any age limit whether it is forty or fifty, find that valuable men seek other jobs several years before they reach those limits. Actual years have little relation to working capacity. Over-anxiety, anger, worry, and most of all fear, all contribute more to age a man than even physical dissipation. More people suffer from fits of anger than from drink, more from fear than from late hours. Men who live in the fear that at some definite period they will begin to go down hill, and instead of choosing jobs, will be lucky to have one, cannot do good work. There are, to be sure, a few men whose mentality is subnormal, whose mental powers never grew and whose earning capacity is dependent entirely on their muscles, but they are very few in proportion to the whole. They must necessarily be our door tenders, elevator operators, and occupy our other low-grade jobs which for the most part consist in being present.

The most pitiful cases are those of men who early in life have started in as clerks, with no opportunity or inducement for exercise enough to keep their blood flowing. Their lives have been dwarfed and made inefficient. They never have developed a body capable of carrying a large brain or conceiving large thoughts. As they grow older there is nothing for them to do but to gradually sink back and fade away with hardly any one to notice their exit, because they have not had the contact with the physical side of the business they are in which is necessary for a true understanding of it. It

seems that we were intended to use all our faculties, and the man who has only seen and talked and heard about an industry doesn't know it. He must have handled and smelt it as well. There is an old saying, just as true now as ever, that no man can sell lumber whose hands are not full of slivers. The same thing applies to every business. No one can talk intelligently about steel, or cotton or oil or any other of our products who has not been on intimate physical terms with it for a long time. How much better it would be if our offices were filled with men who really knew the business. They could accomplish twice as much and be worth correspondingly more than the men who have always had the collar and cuff jobs.

Finally, men change jobs because of their home affairs. This, however, is a matter requiring a great deal of serious thought. Merely seeing that the problem exists will not solve it. It is tied up with our whole social organization.

Under home conditions are included, health, health of family, inheritance of money, combining or splitting up of families, going to school, marital relations and differences of opinion, and many other things which the majority of people prefer to fight out among themselves, whether the world suffers in consequence or not. Many employers are inclined to take a part in such matters, so whatever our personal views may be we ought to give it serious consideration.

What are the cures for the large labor turnover found in many shops? They are as many as there are shops and wrong conditions. Each shop must be studied by itself. There is no cureall. Some of the most prominent and prevalent troubles have been outlined but the whole situation can be summed up in the words "fair play."

Details depend on the conception of fair play held by employer, employee and more especially by the foremen with whom workmen come in contact. We are too much inclined to assume that what has gone on in the past must have been right. That is something that we will have to stop at once. We will have to let the past bury itself so far as possible, start with a clean slate, and judge each case by whatever we can see of the future. The foreman of the future will have to be a diplomat who acts to secure the best possible coöperation

between those who furnish the capital and those who furnish the labor, rather than as a taskmaster solely representing the owner, and commissioned to get as much for as little as possible.





## PART IV

### INDUSTRIAL EDUCATION

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## CHAPTER XXXIV

### THE STATUS OF VOCATIONAL EDUCATION

THE prosperity of a country depends on the prosperity of its people rather than on its possessions, and individual prosperity is the greatest insurance of peace that can be imagined. Prosperity moreover does not mean a national opulence based on paternalism, but comfort earned by individual initiative. Without such initiative a family, corporation, city, or nation may be prosperous as a whole, but its prosperity is founded on the ability of one or a few men, and it is certain to fluctuate with the changing leadership which time surely brings. The advancement of the many lies in the training of each individual so that he willingly takes his share of the burdens of self-support and community welfare. Whatever advantages the inhabitants of the Western hemisphere may enjoy above those of the Eastern are unquestionably due to the larger liberty for personal development and individual initiative which the people have claimed and won, and the logical extension of this liberty is the training of every person in the vocation in which he can make the most of himself.

Vocational education is as old as civilized history. It found early expression in the training of professional men and although scoffed at it nevertheless proved its worth, so that to-day it is universally expected that a man will enter the professions from a school rather than from an apprenticeship. It is true that a few enter law by reading and a few enter the ministry without formal education, but the few only serve to accentuate the general rule. About fifty years ago vocational education, in the form which has developed into engineering education, had its beginning in a modest way, with no loud claims and no apparent reason for exciting the

envy of any one. Nevertheless it met with opposition, not merely from the cultural schools but from the professional schools as well. The development of the engineering school has been a slow one but engineers are now recognized as professional men and the faculties of their schools take their places on an equal footing with those of older institutions.

Such schools, however, all deal with the professional side of vocational training. What can be said of the training for the more prosaic duties of life? Entrance into the trades, arts, and crafts has been from the earliest times through example and practice. They have been carried on very largely by rule of thumb, and precedent and experience have carried more weight than reason. Acquiring a trade has been, and still is, very largely a process of memorizing unrelated facts and blindly practicing accepted methods. Apprenticeship was the only avenue of approach. It was a mild form of slavery into which a boy was sold or bound at so tender an age that his proclivities could not possibly be predicted with any degree of certainty. It was, moreover, so undemocratic that it could not flourish on western soil, and the wonder is that it survived as long as it did. Apprenticeship under an indenture is now so rare as to be a curiosity. Its place, however, can hardly be said to have been filled. Workmen for the skilled trades have been recruited from men who have been attracted from countries where apprenticeship is still accepted, or from those who have "stolen" trades by working in one shop after another until they finally acquired a degree of dexterity and skill that enabled them to hold permanent positions. But if we expect to maintain a supply of trained men, it is necessary for us to first of all consider the facilities which are at hand and their possibilities of development, and then if these are found inadequate to consider new means.

At the present time there are four types of schools to which a young man or woman may go in order to acquire a knowledge of an industrial occupation or trade. These are:

- 1 Private vocational school
- 2 Corporation schools
- 3 Public schools
- 4 Public and corporation schools in coöperation.

Private schools immediately divide themselves into two classes, those conducted for a profit and those which are endowed so that their benefits are partly philanthropic. Schools of the first type are found in large cities where they thrive at the expense of those who feel the pressure of poverty, and who must accordingly begin work at the earliest possible moment. Such schools teach nothing that is not absolutely essential to an immediate earning capacity. They give rule of thumb instruction with very little reference to basic principles and none at all to what may be called shop economics, or the social and political relations of men, as the class of people to whom they cater cannot afford the money nor the time to learn anything but the most essential operations of the trade which they expect to follow. A great deal of dissatisfaction regarding these schools has been expressed by both workmen and employers but as yet no adequate substitute has been offered. They do not, as a rule, teach with the thoroughness that is desirable from all sides of the question, but they do offer a better and more efficient means than "picking up" a trade. The private schools on the other hand which are endowed, and which are really philanthropic in that they offer tuition at less than cost, are doing good work, but they are few and far between. Many of them have lost their distinctive trade features and have taken a place intermediate between trade schools and technical schools. They turn out men who aim to become foremen rather than workmen and while their ambition is laudable it does not add materially to the facilities for learning manipulative processes.

Second on the list is the corporation school, which is a private school run for a profit, but not, however, for an immediate profit. It may be possible to conduct such a school so that its product will pay for the cost of maintenance, but it is not at all likely that it can be done and still turn out the type of graduates that will prove the most valuable. These schools are distinct from the first class of private schools in that the latter gets its profit from the tuition charged, while the corporation school not only gives free instruction but pays wages as well. This very fact excites suspicion in the minds of many as they wonder whether a school in which

the learner has to produce enough to earn his way can be thorough enough to give the general training which is desirable. It can be said, however, that corporations find it to their advantage to devote a very considerable amount of time to education in economics as distinct from the immediate shop problems, and that training in loyalty and a proper understanding of the problems of manufacture and sale, which are outside the immediate sphere of the workman, prove to pay good future dividends.

None but shops of some considerable size and wealth can afford, however, to maintain any educational departments, and consequently only a small part of the youth who might like to learn a trade can be accommodated by them. This and the feeling which prevails, especially among the workmen themselves, that education is a community problem has led to the establishment of a number of publicly supported trade schools, usually known as vocational schools. Such schools range from pre-vocational, which aim only to open the way for the pupils to enter the lowest grade of a vocation, to those which teach a trade together with the essentials of a cultural education. Public schools for this purpose are expensive as compared with the cultural public schools, but if adequate results are obtained the expense is justified. It has been possible in several states to obtain legislation which grants state aid for such schools as give direct and substantial trade training and the cost to the local community has been brought down to approximately that of the ordinary high school.

Grave questions of control have been brought out by the movement for industrial education. It is necessarily admitted that the industries must be manned and that the interest of the country as a whole demands that they be well manned, and yet there are a great many people who shrink from anything that will look like public sanction of any form of school that does not prepare its students for college or university. In fact, the entire school system of the country has been based on the idea that every one should aspire to become a university graduate, and that men for the trades and industries should be recruited from the leavings or by-product of these schools. At one time the advent of the engineering school

seemed likely to break up the unity of this plan, but the problem was solved by recognition of the technical schools by the colleges, and while this concession was made grudgingly there is little doubt but that it was a wise decision. The same solution, however, can hardly be made of the industrial school problem. Such a school cannot train men for the higher schools of engineering, because it is frankly something more than an educational movement. It plans to teach and train at the same time. The graduate must be able to prove his knowledge by his work. It is not enough that he should be able to calculate the speed at which a steel shaft would revolve in a lathe. Such knowledge alone is worse than useless to him. He must be able to put the shaft in the lathe and turn it at the proper speed.

It will, therefore, be seen that there is a real difference, which is also irreconcilable, between the formal education of the public schools and the education and training of the trade school. This difference has led to a bitter controversy as to the control of the new schools. The dispute is always over the question of whether the new schools will be established and controlled by the same agencies as the public schools, that is, whether they shall be a part of the public school system, or whether they shall be under entirely separate control. The advocates of separate, or "dual" control, claim that the opportunity to do this work has rested with the public schools for many years and they have not merely ignored it but have fought it bitterly. They also claim that there is a very pressing need of trade training, that the prosperity of the country is dependent on it, and that if it is to succeed it must be placed in the hands of its friends. They cite the results of placing drawing and manual training in the hands of the public schools. They claim that these subjects have been so highly refined by the public schools that there is no value left in them from the point of view of the industries to which they are supposed to apply. The professional educator, on the other hand, sees grave danger that boys and girls who might otherwise grow up into the professions may be diverted into what he considers the baser channels of trade and industry. He believes that they should be given every opportunity to

advance to as high a position as possible, and his idea of a high position is one that demands a great amount of the preparation which formal education offers.

Experience, however, indicates that it is not at all necessary to arrange the curriculum of an effective trade school in such a way as to handicap the graduate no matter in what direction he may desire to advance. The studies which are offered to him in high school, with mental discipline as their aim, are replaced by others which combine with that same mental discipline much useful information. The actual number of hours of recitation in most of the trade schools is as many as are required in the average high school for graduation. Work in foreign languages is usually omitted, a considerable amount of mathematics is made more directly applicable to the industry in hand, and much more attention is also paid to physics. The shop practice is almost entirely added time. The pupils in a trade school are kept a great deal busier than those in the usual high school, but the work is varied so much between shop and class room that there is neither mental nor physical weariness. There appears no good reason why all of these innovations should not be incorporated in the public schools. The experiments at Gary seem to indicate that a very considerable gain comes from lengthening the time during which the pupils are under the supervision of the school authorities. Boys and girls of high-school age who attend a single session and are left to study out of school are very apt to do their work in a most perfunctory manner. They either play all the afternoon and then sit up late at night to get their lessons, or else they study all the afternoon and go out to dances, parties or theaters late at night.

The lack of useful application of many of the studies which children are forced to endure for the sake of getting into college is constantly calling forth a great deal of adverse criticism. The colleges, however, are self-perpetuating and therefore independent of public opinion. In the Middle West where public control is gaining ground there is a marked change in the attitude of the college faculties toward the people and the result has been that some advancement has been made. This same public opinion may yet assert itself



in unmistakable terms all over the country, and it may be that the absorption of the industrial schools by the public schools will mark the passing of the name in one direction and the methods in the other.

As a matter of economy of money, time, and effort, there is no doubt but that all educational effort should be under a single administrator who should be broad-minded enough to recognize that education may be useful as well as luxurious. So long as colleges depended solely on the rich men's sons for their support the people as a whole wished little to say about their methods, but as soon as it became possible for the poorest of boys and girls to work their way through the colleges, aided by scholarships granted by the public, then it became essentially an affair of the people. The industrial school movement is largely a public movement, and as such it recognizes the right of every citizen to training at public expense, no matter whether the immediate object of that training is entrance to the professions, to commerce, or to the industries. The people will not recognize that the professions are in any way any higher than the industries. They remember that "a man's a man for a' that," and they will ultimately insist that their schools recognize it also.

It, therefore, seems safe to conclude that in many instances it is wise for a community to safeguard its industrial schools by placing them under the control of a friendly board of trustees until the time comes when their value and right to exist is recognized by the authorities of the public schools and it is safe to make the control the same for both, without danger that the practical nature of the trade school will be taken away. In this way the energizing force of the more vital methods of the trade school will become an important factor in the creation of a public school system which will serve the needs of both present and future with greater efficiency.

The difficulty of control, as previously discussed, has led to an attempt to combine on a coöperative basis the best of the public school systems and the best of the shop systems. The shop furnishes the training in mechanical processes, by putting the pupils at productive work and paying them wages, while the school furnishes the cultural studies and the class-

room work which relates to the trade. The division of time between shop and school varies from the half-time school, in which alternate weeks are spent in shop and school, to the continuation school in which from four to ten hours a week are spent in classroom and the rest in the shop.

This method of coöperation has been extensively exploited but as yet has not had any widespread adoption. The difficulty appears to be in the lack of an understanding of the problems of the shop by the school people and a corresponding lack on the part of the shop men. The scheme is not attractive to employers, unless the apprentices are profitable, for in most instances it appears to be undesirable from all points of view to put the pupils under bond to remain during the whole course. In fact, there is a very decided feeling among the more progressive manufacturers that an unwilling worker costs more than he earns. At the same time it is equally well accepted that boys need to be strongly led and influenced, and that their tendency to drop one job and go to another is often like falling "from the frying pan into the fire," and that in the long run they appreciate the employer who has held a stern hand over them.

A discussion of the opportunities for trade training would not be complete without some reference to the relation of the technical high school to the industries. Many of these schools have remarkably fine and complete equipment. They have all the facilities for giving a very complete training, and yet they seldom offer courses which they claim will fit boys for skilled trades. These schools teach wood working, machine work, forging, etc., not for their application to production but for their educational value. They are primarily schools, and tradition has long attempted to confine school work to purely educational activity. The signs of the times seem to indicate, however, that social and industrial activities will soon take their places on a plane of equality with the more purely educational work. Both require not only teaching but practice as well, for it is not enough that the pupil shall know; he must also be able to put his knowledge to work with intelligence, and with a certainty that he will produce results with reasonable celerity and with some degree of automatic action. This the

technical high school does not attempt to do and the result is that their graduates find themselves without the proper training with which to enter industry, except on its lowest rounds which seem to them to be beneath their dignity. Therefore, they are apt, if they seek employment in shops at all, to go into offices or drafting rooms where their training proves helpful in that it has given them an amount of mechanical intelligence which is lacking in the graduates of the grammar or the ordinary high school.

The number who are able to avail themselves of any or all of these forms of education is very small compared with the great number of wage earners who might profit by some form of training. The census of 1910 disclosed about thirty-eight million earners in the country (this omitted all women keeping house in their own families, probably because it was impossible to establish the amount of their earnings) and of these at least half were in skilled or semi-skilled occupation in which the use of both hand and brain is necessary. The same census classification also shows there were over six million people on farms whose need of education will at once be admitted. In addition to this there were over seven millions in manufacturing work. Then there were three hundred thousand in transportation, a million and a quarter in trade, two million in the professions (who have already been provided with facilities for education and training), nearly two million more in domestic service and nearly a million in clerical work. There were also a quarter of a million in public service to which entrance can be gained only by long and arduous labor, and to these there should also be added another million and a half of farm laborers, every one of whom could profit by training. The number of housewives whose earnings are quite equal to that of the head of the family, if the service rendered could be expressed in money, is unknown, but it seems safe to assume that for every ten of the population one woman works hard to bring up a family, feeding and clothing them during their childhood. The women who idle away their time as butterflies in society greatly impress us because we hear so much about them, but they do not constitute a large part of the population. Thus only about 1-70 of 1 per cent of the work-

ers are getting direct training for their vocations, and only  $\frac{1}{4}$  of 1 per cent are getting education which is even related to their vocation.

All of these different forms of industrial education can only be considered in the light of experiments, none of which can be said to have failed, and none of which have as yet appealed to the public as leading toward a solution of the problem. In fact, the problem is composed of so many and so diversified problems that even more experiments and more diversified means will probably yet have to be devised and tried out.

## CHAPTER XXXV

### A STUDY OF THE PROBLEM

**I**T has already been pointed out that a very large part of the work of the world is done on a basis of precedent rather than on a basis of scientific investigation. Scientists have busied themselves with large problems, and the details of the methods by which their discoveries may be made useful have been neglected. Scientific management, so called, has little of science about it but is rather a bringing together of rules of thumb and classifying them so that they may be workable by system. It is, however, undoubtedly the entering wedge toward the application of science to our shop and factory problems so that some day our work will all be done on a more satisfactory basis. When that time comes the problem of trade training will be much simplified because it will become a problem for which our educational system has been expressly developed. In the meantime there is great demand for able mechanics and capable men. In good times prices may be made high enough to cover ineffective work, but in dull times prices drop to a low level, and the best of workmen are not good enough to make it profitable to do the small amount of business that is presented. In slack seasons the men who can be retained need to be better developed as all around workmen because it is necessary, in many cases, that they should combine with their regular work other functions which belonged to men who were dropped from the payroll. The problem will, of course, not wait for our shops to be placed on a scientific basis, but fortunately a considerable part of the problem is not likely to be changed by that innovation.

The highest type of workman is the one who not only has

the ability to earn money but also the ability to spend it wisely and to live in a right attitude toward his fellowmen. Education in the appreciation of what is good, in distinction from what is costly, is at least as necessary for the man who is to earn large wages in the industries, as it is for the man who is to earn a small wage through the professions. If a bricklayer earns \$2000 a year he certainly should know how to spend it to the same advantage as a professional man who earns no more. The very fact that industrial education is intended to make the wage earner more prosperous is reason enough for insisting that he also be given at least as much of an education in appreciation as the boy who expects to enter commercial or professional life. Then again the wage earner comes in more intimate contact with the disputed points between labor and capital than those in other walks of life. It is desirable that he be fully informed of all the circumstances which should influence him in his attitude toward his employer. He should be taught, not merely his rights under the law, but also his responsibilities and duties as a man and a citizen. In this one field alone much can be done to alleviate labor troubles, for most disputes come about through misunderstandings. Nor are such misunderstandings limited solely to labor troubles which break out in strikes, but they extend to the daily and hourly friction which has so bad an effect in a factory where disagreement is smoothed over but not up-rooted.

It should not require a large amount of time to present those portions of the curriculum which should be common to all schools but which are not always given sufficient prominence. The larger part of the time must still be given to practice, which is different for every trade and for every community in which the trade is practiced, but which also has some fundamental principles which are common to groups of trades if not to all. The one fundamental of all trades and vocations is the art of measuring, and this can be taught with profit to those in every walk in life. The same principles are used by the cook and the machinist though the latter might not recognize it at once. Beyond this point the different vocations can be subdivided into large groups having common

principles, until the point is reached where a final decision must be made and the pupil takes up the training which applies only to the particular trade which he has chosen for his life work.

In order to properly consider the various trades and their relations and to discover, if possible, the extent to which trade training may be used as vocational guidance, it is necessary to analyze the processes of industry as well as the mental processes of the prospective worker. All vocations may be broadly divided into those which are mere repetitions of a given task and those which require original thought in each case. For example, a weaver or a street sweeper who has once learned the particular manipulations of his craft becomes almost automatic in it; he meets with no emergencies except those with which he soon learns to cope. On the other hand, the lawyer, clergyman, farmer, or painter, all have to meet every case as it comes. They each use certain fundamental principles in all that they do, but those principles become simply tools with which they do their work. In the other class the work is the routine exercise of principles. A little study of the various industries discloses the fact that there is great need of reasoning power, and that the number of places where men can work in a purely automatic atmosphere is small. We also discover that almost all vocations have their automatic details. The lawyer carries this so far that a large part of his work consists of filling in standard legal blanks, the minister is apt to fall back on stock expressions, and the machinist who is working at a semi-automatic machine supplies the remaining amount of automatic action.

Then there are two distinct types of industry when considered as a whole. There is the type in which a raw material is treated in various steps but always in the same steps, like the manufacture of wire, of textiles or of garments, where one process follows another always in the same order and where there is little or no variation in the product that requires variation in the workman's manipulation. At the other extreme are vocations like wood carving, stone cutting, etc., which call for very little repetition of work but for a very decided degree of artistic ability.

There is also the question of the adaptability of a given person to any one or a number of different vocations. It is necessary for our comfort and prosperity that all these vocations should be fully manned no matter what their lack of desirability. To-day the undesirable jobs are filled by those who cannot get desirable ones, and who accordingly get the smallest pay and the least satisfaction in life, but it is conceivable that if every one were trained to do the work he was best fitted to do, that it would be possible to fill what are now the undesirable jobs only by making them desirable, either by bettering their surroundings, by additional compensation, or by decreased hours.

There is a great difference in men from physical, mental, and temperamental points of view. The improvement of machinery has diminished the physical distinction until it is almost eliminated. Derricks and cranes have taken the place of strong backs, and brute force is confined to athletic triumphs. The mental and the temperamental attitude are the strong deciding factors which determine the work which one should attempt. Ability to do a given piece of work and a liking for that work may not necessarily go together. A man may be able to earn the best living working at some task for which nature has fitted him in everything except a liking for it. In that case he must decide for himself between his duty to his family and the community, which leads him to do the work at which he is most valuable, or to follow his own inclination and do the agreeable task and accept the material sacrifice which is inevitable.

Any program of industrial education must take into consideration the present state of affairs. It is not enough to suggest a way of training those who will be the workers and the leaders in years to come. It is necessary to provide for the improvement of those who are already working. The program should not, however, be such that it will attract the young man or woman who might otherwise get a full training. It should not be necessary for a boy or a girl to give up a broad general education in order to learn the specific details of any vocation. He should not be obliged to enter industry in order to get a training in that industry. On the other hand,



if circumstances make it necessary for him to seek employment he should not have to give up all hope of becoming educated in as broad a sense as his surroundings and mentality will permit. Finally the mental capacity of the pupil must be taken into account, not that any mental faculty cannot be developed under proper treatment but because efficiency demands that we make the most of our natural possessions, and because the work of the world affords places for every type of mentality short of the imbecile.

## CHAPTER XXXVI

### VOCATIONAL EDUCATION IN THE PUBLIC SCHOOLS

VOCATIONAL training in the public schools is a comparatively simple problem, and one which has been sufficiently worked out for so many vocations that a more or less established method of procedure can be set up as capable of effective use. On the other hand, the relations of the basic principles of the various industries have never yet been thoroughly brought out, with the result that each vocation is taught as a unit, and so the boy who enters one and finds that he is not able to adapt himself to it without a serious struggle and decides to enter another has to go back and cover the entire ground of the new vocation. Attempts have been made to study individuals, and to give them intelligent advice as to the vocations in which they might find success, but the psychologist has so far declined to concern himself very closely with the actual conditions of industry. Until some one who has had personal experience with the industrial processes under the pressure of necessity also studies the question from the point of view of the psychologist there is little hope that much help will come from that direction. Caution will dictate that it is desirable that every boy and girl study the subjects which are common to all vocations. This is already done in our public schools which are vocational to the extent that they teach reading, writing, the use of mathematics, and science.

Beyond this point, however, it should be possible to carry along parallel courses with interlocking channels so that the pupil who after grammar school decides upon a college course and who later finds that his desire cannot be fulfilled, except at the cost of extreme hard work, can change to a course which leads to industrial or to commercial life. During all

this preparatory time the fact should not be overlooked that the greatest common lack of school children is the inability to work except under constant oversight. Training in work, the creation of the ability to do something regardless of whether it is a process in any particular vocation, is of prime importance. A child may be taught to work in a garden without taking away any of the chance of his becoming an expert stonecutter or lawyer. We are in the throes of an all-too-prevalent tendency to sympathize with childhood and to protect it, and too little inclined to train it for the stern realities which it must soon face. It is better for a child to learn to apply himself and to find the satisfaction of a job well done than it is for him to be thrown on a world which is full of temptations when he reaches his maturity. It would undoubtedly be a great advantage to both boys and girls if they could be brought in intimate contact with real work under surroundings which would safeguard their physical and moral well-being. This can be done in the school by providing shops in which the work offered could be so simplified that the training in work and application will receive the emphasis rather than its educational value.

Once past the stage during which education should be quite general and when the pupil has come into contact with enough different vocations to have acquired some idea of his preferences and to have given his advisers some notion of his future possibilities, the time for specific training in a given industry is reached. This training should be very direct. It should consist of practice on the actually productive work of the trade. While the educational value of the work should not be overlooked it is necessary that the pupils should not be allowed to forget its commercial value. Work should be done in all the ways that are commercially used. No work should be performed until the pupil understands why; nor should a job be allowed to pass until the instructor is satisfied not only that it was well done but well understood. Shop practice should dominate the training, but it should only lessen the relative place of the general and related mathematical and scientific work which should be given between the intervals of practice.

These two portions of trade training might well consist of, first, pre-vocational work dealing with work in general with no particular aim beyond familiarizing the pupil with work and the various vocations which he might enter, and second, specific trade training under supervision of instructors whose work it is to make something of the boy rather than to get the boy to do the largest amount of work. The time which should be given to these two periods should not be definitely prescribed. It might begin at twelve years of age and run two years for the majority, but it should last for each individual only until he definitely finds himself and is ready for specific training in a vocation which he and his advisers could agree upon as likely to prove satisfactory. For the pupils who did not so easily find their place it should last much longer and cover a wider range, until the instructors were ready to agree upon the probable place in life to which the pupil might reasonably aspire. It is fully as important that the apparently hopeless cases should be thoroughly studied as that the brighter and more decided pupils should be prevented from making rash decisions, for the ill-effect on the community will be greater in the former case than in the latter. The bright boy will make a change into another vocation more easily than the duller pupil.

It is found most satisfactory to make the alternations between classroom and shop weekly, because this plan gives a very desirable continuity of work, and also because it is then easy for a pupil who finds it necessary to earn his way to continue his school work half of the time. That is, a pupil in a school where alternate weeks are devoted to classroom work can, in case of necessity, secure a job in a shop where he can pair off with another boy who will work the weeks that he is in class, and thus still retain his membership in the school and secure the advantages of both the cultural and related studies.

A typical division of time between shop work and the various classroom studies is shown in Figure 16, which is the arrangement used for machinists at the Worcester Trade School. The cultural studies are grouped between the lines *A* and *B*, the related studies are above and the more strictly

manual work below. The related studies begin with a review of arithmetic, applied to the trade, which is called, Shop Computations; a small amount of time is also given to algebra and geometry, and trigonometry is studied under the name of Study of Triangles. All these subjects are very elementary and confined closely to the applications which a pupil may reasonably expect to find in his daily life or in his trade. These related mathematical subjects are continued through

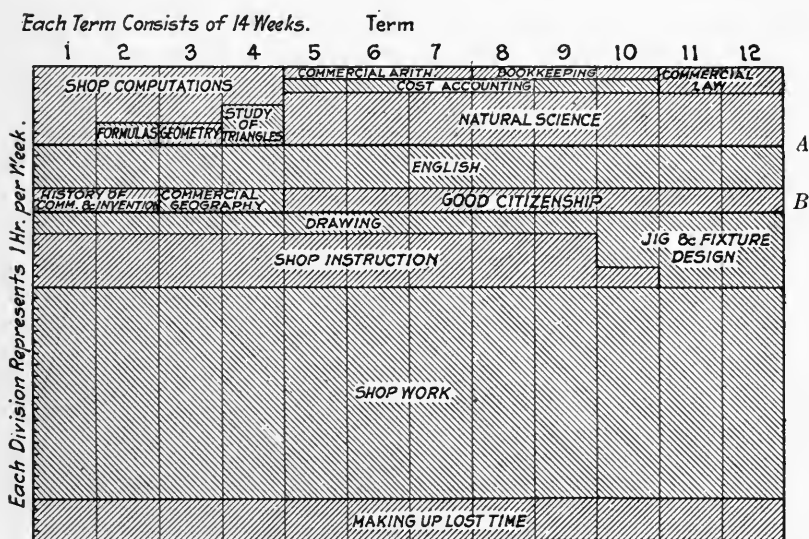


FIGURE 16. DIVISION OF WORK AT THE WORCESTER TRADE SCHOOL.

four terms, or one and one-third years. It is followed by Natural Science which for those in the machinist's trade consist of mechanics and strength of materials, a little electrical work, and a very small study of heat, light, and sound. At the same time there are given short and elementary courses in Cost Accounting, Commercial Arithmetic, Bookkeeping, and Commercial Law. The Cost Accounting and Bookkeeping are based on the actual work of the shops, close watch being kept of each pupil's activities exactly as if he were working for wages, and the results are tabulated as they would be in a commercial shop.

Under the head of English, there are really three divisions:

first, reading for general information and style, second, reading the trade papers for the sake of familiarity with the mechanical progress of the trade, and third, study of the English language and the pupil's own use of it in compositions consisting of reports of the work which he did in the shop the previous week. This work in English goes through the entire course of study; it is paralleled by a shorter course in the History of Commerce and Invention, which has two purposes, one to dispel the idea which pupils form from the use of ordinary text books, that history is confined to wars and bloody conquest, the other to bring plainly before them the fact that a large part of the constructive work of the world has been done by mechanics and engineers rather than by the men from what are sometimes considered higher walks of life.

There is also a course in Commercial Geography, which is made broad enough to cover the general lines of commerce of the world instead of being confined to the paths in which the product or the materials of the specific trade follow. The last two and two-third years include a course in Good Citizenship based primarily on the relations of the pupil to the shop in which he may be employed, his fellow-workers, and then to the city, state and nation of which he is a part.

The larger part of the work of the school, that indicated below the line *B*, is manual, but not automatic. Drawing, which extends through the course, changing during the last year to Jig and Fixture Design, is done on a shop drafting-room basis. The course in Shop Work consists of actual use of machine tools on productive and salable work, while the course in Shop Instruction stands intermediate between the related work and the shop work. It is a combination of hand work and mental work which considers the whys and wherefores of the shop work, and finds the points of application of the other class room work to the shop.

This schedule is typical of that used in the larger number of trade schools. The number of hours devoted to the different subjects is varied somewhat, and the subjects are changed for the different trades. A printer does not need the amount nor the kind of drawing that a machinist or a pattern maker demands. A painter has no need of much of the mathematics,

nor does a bricklayer need the kind of natural science that has been outlined above. Each trade needs and receives special treatment and consideration. The length of the course is varied according to the idea which prevails in the particular school, namely, whether the graduate is to be wholly prepared for any branch of industry, or whether he is expected to acquire a considerable portion of his training in the outside shops after graduation. In general this outline is followed in principle if not in fact.

## CHAPTER XXXVII

### VOCATIONAL EDUCATION IN THE INDUSTRIES

NO matter how good the facilities offered them, many young people leave our schools and enter the industries. Their reasons for so doing are many. They may feel the pressure of money matters through necessity or through a desire to become spenders at the earliest possible moment. They may be weary of school and anxious to change, merely for the sake of change. They may honestly feel that the surest way to advance is to begin at the bottom and work up, without having any very definite idea as to the possibility of working up, or it may be that some one of a number of different schemes for the training of workmen in the shops may appeal to them. The plea of poverty when followed to its conclusion most often turns out to be avarice. The children, or their parents, want those things which they are accustomed to think of as luxuries, or which seem to them to stand for social position. If it is a case where the children are anxious to get away from school life, it may be because they are over-age and sensitive about associating with smaller children, or it may simply mean that they have not found themselves, and so they must wander industrially until the time comes later in life when they shall awaken to their possibilities. The author's experience with young men leads him to group the larger part of such misfits in industries under this latter head, and to feel that most often they reach the floating stage through lack of encouragement rather than through any exalted idea of their ability to get along without training. The "swelled head" is much talked of but rarely met with among workmen.

Regardless of how these young people of both sexes reach



the shops and factories without any vocational training, the fact remains that they do, and in very large numbers. They often reach the age of twenty or twenty-five before they find that they have aspirations which can only be met by increased earning power. They discover the impossibility of saving anything on the wage of unskilled workers, and that their only hope is in increasing their wages to the point where there is a margin between their actual necessities and their income. If at this stage, and before they give up hope, they can be reached and given an opportunity to make something of themselves, the gain to the community is almost beyond the power of figures to express.

The various agencies which are attempting to meet this condition may be divided into the commercial, the philanthropic, and the selective. The commercial is represented by those private schools which teach for a fee that covers the cost and affords a profit to the promoters. The philanthropic includes both privately endowed schools and those which are conducted by the community through the local community alone or by means of state and federal aid. The selective include those private firms or corporations which select their employees through the medium of a training class, which is both an educational factor and a selective process and by means of which the dead wood is eliminated, and the capable and willing worker whose possibilities may be brought out is thus selected.

Of these three types, the philanthropic should do the most for the worker. The selective will do the most for the industry. The private school, operated for profit perhaps, has a field in those lines of endeavor where a small amount of training will enlarge a person's earning capacity to a considerable extent. For example, a man may find himself unable to accept a promotion which is open to him unless he learns to read drawings. In that case a very short but intensive course in plan reading may be worth a very considerable sum of money to him. These schools, however, will very likely give way before the advance of the other two, but they will have served their purpose because they have paved the way for the philanthropic and semi-philanthropic schools such as

those conducted by the Y. M. C. A. in all sections of the country. These Y. M. C. A. schools have broken away from traditional and formal education, and offer evening courses which have a specific purpose in mind, and which do not necessarily form a part of any long continued course of study. They give, for example, a ten weeks' course in plain reading, or a twenty weeks' course in press feeding. These short detached courses are now known as "Unit Courses" and are now being adapted to the work of the evening public schools.

It has long been the custom for the public schools to offer evening courses, for a small fee or even free of charge, in such subjects as drawing for machinists, design for jewelers, etc., which were intended to supplement the work which the workman might be doing during the daytime, and also to open these courses to others who might hope to learn a trade by so attending. However, it is now generally recognized that it is a hopeless task for any one to learn a trade of any complexity by attending evening school alone, no matter how good the instruction nor how complete the equipment. Accordingly, several states which have passed laws devoting public money to the aid of vocational schools have stipulated that none of it shall be used to train men in trades which they do not have the opportunity to practice during the daytime. This has caused considerable criticism, based largely on the assumption that every one should have the opportunity to acquire a trade at the expense of the community, even if it must be done under conditions that seem unlikely to bring any tangible results. Probably sober second thought will lead the critics to see that very often men need to be protected and prevented from wasting their time upon something that has very little chance of returning them adequate rewards, and that the effect of these laws is only to make it necessary for men to back up their faith in their ability to learn a new trade by actually entering a shop or factory.

It should be noted that it is often found desirable in evening classes to entirely separate practice work and theoretical or book work. The average mechanic thinks that his most rapid advancement will come with the ability to do work other than that which he has been accustomed to do, and this is

undoubtedly true in many cases. It is very often difficult for a machinist who is a lathe hand to get any opportunity to become a planer hand, even though by so doing he might make himself worth several dollars more a week. If he can go to an evening school where he can learn to operate a planer he will do so. The same is true in almost all the other trades. It is only after a man has begun to lift himself above the general level of his fellow-workman that he begins to see the need of advanced mathematics, science, etc., and then only as they are very directly applicable to the work which he sees ahead of him. While this is to be deplored, it is a condition which must be met if any degree of success is to come from evening school work.

The greatest difficulty with which evening work has to contend arises from the habits of those who attend. A man who works at a more or less manual trade is not likely to be in the habit of going out evenings. His idea of comfort is usually confined to a pipe and a comfortable chair in the kitchen. If he goes out at all it is either to a moving-picture show or to some other place where he has nothing to do but be entertained. If he goes to a club or society it is usually to sit and smoke, but if he attends an evening school it necessitates an entire change of mental habits that very likely have become deeply rooted. For that reason he prefers the shop to the classroom, for there he feels more at home, the results are more tangible, and he is less likely to make himself conspicuous by his mistakes. There is a great deal of sensitiveness among workmen even though they may appear callous on the surface and it must be reckoned with in dealing with them.

This limitation of the evening school has led many large employers of labor to establish classes which have the same general intent as the evening classes, but which they conduct in the daytime and often in their own shops. The pupils are their own workmen, usually young men or boys, who are paid wages which continue during the time which they spend in the classroom. These workmen are usually called apprentices, though they are seldom indentured. Such corporation trade schools are of three kinds: (1) those in which there is but slight change from the old apprenticeship system, and where

there is no organized attempt to do other than secure the apprentice a fair rotation through the different branches of the trade; (2) those in which the shop work is left to be guided by the foremen of the different departments, subject only to a general scheme of transfer from one department to another, but where from four to twelve hours per week are devoted to classroom work of the type which would be offered in an evening school; (3) those in which a distinct apprentice department is set off in the shop under the care of men whose first duty is to make workmen of the boys by instructing them carefully and painstakingly in the methods of the trade as practiced in the shop, and where there is also the classroom work belonging to the second type.

Of these three types the third is of course the most favored, as it is the most complete and best fits in with the more modern and scientific method by which shops are at present being conducted. It is the most costly at first but probably the most profitable in the end, and especially so if the instructors are selected for their ability to teach modern methods and keep their pupils from acquiring those deplorable habits which are more or less persistent in the shops, such as the lack of application and the doing of work in ways which are time-honored but not effective.

One very distinct advantage which the corporation school has from the point of view of the trade is that being a private school it can make its own selection of pupils with only due regard to its own best interests. It will not be likely to have the patience with boys in their formative stages that a public school should have. In fact, the tendency is not to accept boys until they are well through the adolescent period and have begun to take account of themselves and to begin to feel a responsibility. The boy from a public or private trade school should have a start of from two to three years over the young man from a corporation school. On the other hand, it is inevitable that the cost of carrying a boy through a public trade school will be greater than the cost of similar training in the corporation school. The value to the community, however, will be likely to be much greater in the case of the public school, since the boys who will be accepted and graduated

by the corporation school will be a picked lot who probably would have done pretty well in any case, while the public school pupil will be the run of boys, some bright and capable without training and some rather dull and slow with the best that can be done for them.

The corporation school can also be run on comparatively narrow lines, though fortunately many are not. The boys may have their education confined almost exclusively to those subjects which it is known will add to their value while they are employed by the company which educated them, or their education may be broad enough to include subjects which they may never find a direct use for unless they change their vocation. General education is not usually considered to be a part of the work of a corporation school. It is usually expected that boys entering these schools will have had a grammar-school education, and possibly part, if not all, of a high-school training, so that little criticism can be made if the education offered by the corporation is confined to subjects which it seems probable will be of immediate value to the pupil.

The cost to the employer of this form of education is considerable. It not only includes the cost of furnishing instruction, and the expense incidental to the room and apparatus which it requires, but it includes the loss of earning capacity during the time the apprentices are in the classroom, the loss of the overhead charges for the machinery and space which they normally occupy in the shop, and the loss due to the additional time spent in giving them instructions in the shop itself. All these can only be made up by increasing the efficiency of the workman, both during the course and after it is finished. Inasmuch as the average skilled workman probably does not do more than 50 per cent of the work which he might do each day, if he knew better how to do it, it is evident that there is an excellent chance for a corporation to make a school profitable both to itself and the young men which it is training. The largest profit, however, is a deferred dividend, for the greater the effort to exploit the apprentice and get immediate returns the less valuable he is likely to be after graduation. If, however, greater effort is put into his instruction, and less into the rapidity with which he does work during

his apprenticeship, he is likely to establish a strong base on which to later build rapidity of production.

There is a danger that the graduate may leave the shop where he has received his training and rob it of the opportunity to profit by the work which has been put into him. One of the older of these schools reports however that over 90 per cent of its graduates remain in its employ, while another deliberately advises many of its graduates to go out for a year or two into other shops to broaden their ideas of shop methods, trusting that they will return later and be all the more valuable. They report that they find this a profitable procedure. In the case of the first shop it should be stated however that it is practically the only shop in the country in its particular line, so that there is not the same opportunity for a young man to acquire additional knowledge having a direct bearing on its work by going to other shops.

The corporation school is varied by a connection with the public school, by two methods which have been given a considerable degree of prominence. One of these is the so-called half-time school, or Fitchburg plan; the other the continuation school. Both of these have their strong points, also their weak ones. The Fitchburg plan is an arrangement whereby a number of pairs of boys alternate, week in and week out, between the public schools and the shops in which they are employed. It is a strong plan in that it places the cost of instructing the pupils in the cultural and semi-cultural studies in the hands of the community, and yet leaves the specific training for the trade to industry. The danger is that the division of the training may be one-sided, for, as is almost always the case, the pupils are sent from the shops to the public schools with all degrees of preparation and from places where diversified trades are practiced by different methods. Also the instructor who is called on to teach anything beyond the most elementary mathematics, drawing, and science finds himself totally unable to do justice to any one except on an entirely individual basis. This limits him to a class of eight or ten, which is so far below public school standards as to excite vigorous comment and make the cost excessive. If the work of the classroom is confined to those subjects which are

of common interest to all the pupils it virtually becomes a typical high-school class, and the pupils might as well be sent to a high school alternate weeks and have the same curriculum as is given to those who are not working. In other words, the specific trade instruction should be eliminated from the course and any classroom work related to the specific trade should be given in the shop as in other corporation schools.

There is also another objection which is made by some, but which is usually a theoretical one, and that is that every class in a public school should be open to any one who has the requisite preparation, for when a boy's membership in a given class is contingent upon his being employed in one of a given set of shops the condition of business will have a positive influence on the employment of the pupils. This is a condition, however, that is not likely to occur, as it is not probable that any school superintendent will actually expel a boy from his classes simply because he has been discharged from a shop.

The second method by which the industries and the public schools coöperate is by means of continuation classes conducted by the public schools. These classes are identical in aim and treatment with those conducted by the corporation schools except that they must be made sufficiently general in their scope so that pupils from different industries or branches of the same industries can be taught at the same time. There is thus the same difficulty about giving specific instruction in studies relating to the different trades as in the half-time school, and this is inevitable unless the local industries are of such size that classes can be formed into which each pupil will fit and find work in which he has a direct interest. The continuation school is, therefore, best adapted for cities where no one industry is large enough to support a class of its own, and yet where the industries are large enough so that individual classes having a common purpose may be held.

The controlling purpose of all these schools is the same as in all other trade education, namely to fit boys and girls, young men and young women who have already entered the industries for higher places. The aim is both selfish and unselfish. The first impulse to form a corporation school may

come from a desire on the part of the firm for greater profit, but in order to make the greatest profit, it must be even more profitable to the learners than to the company which inaugurates it. Its instructions must of necessity be directed along the more or less narrow lines of the specific trade or vocation for which it is intended to train the pupils. The broader education must have been acquired before the pupil left school, or it must be obtained by dint of much reading outside of working hours, or by means of correspondence courses.



## CHAPTER XXXVIII

### GENERAL TRADE METHODS

**N**O matter what the method by which vocational training is to be given it is of prime necessity that it be based on the way in which the work of the industry is done. Unfortunately there is a great lack of understanding of this subject which is not confined to the promoters and teachers of industrial subjects, but which also prevails among workmen and higher officials of manufacturing concerns. It would seem as though men who had practiced a trade all their lives would be the best fitted to prepare courses of training and teach those trades, but in practice this is not the case, for such men have acquired their knowledge in the slow and laborious school of life. They have never analyzed what they do, and if confronted with the question, "Why do you do that?" they are absolutely unable to give any reason, except that that is the way it has to be done. They are ultra-conservative because they have all their lives been dependent on the salary of the job in hand. They have not dared to think independently, nor have they had the opportunity to try the simplest experiments. They assume that what has been good practice always will be good practice. A shoemaker's or a stone mason's hammer is shaped to-day in a way that was established by custom centuries ago, and few workmen can be found who will use any other than the standard implement, nor can any one state why that shape is the best.

Unfortunately the teacher, the college man, has no conception of the needs of the industrial worker. He may enter a manufacturing plant for a short time to acquire the "atmosphere," but in the short time that he is willing to give he cannot possibly get more than the most superficial acquaint-

ance with the work. He will not stay long enough to put himself in the class with skilled workmen who have only reached their positions through years of diligent application. Technical graduates who have gone into shops and worked their way up are likely to acquire the proper viewpoint of the relations of industries and educational work, but they can very seldom be persuaded to do this because they can command higher places in the industrial world. The work, if done, must then be done by coöperation between shop-trained men and school-trained men. The facts of the industries must be brought out by the shop men and laid before men who can analyze and answer the perpetual question, Why? If the shop men do not know why, then there must be experiments which will give the answer. The gain to the industries themselves from the results of these experiments would justify the expense, even if no training whatever were done. A little, a very little, of this work has been done in the name of scientific management, but even there too little attention has been paid to underlying principles and too much to development of motion studies of rule of thumb methods.

Such a study of the industries will develop at once two very distinct types of manufacturing. One which we may call the process method, for lack of a better name, and the other the part manufacture and assembling method. Under the first may be classified most textile work, most of the manufacture of iron and steel, production of foodstuffs, etc., while under the latter are building operations and the manufacture of automobiles, engines, and other machinery. The work under the first heading is done largely by men of little skill who have no conception of the process as a whole, but who are guided and led by a few men of large ability and equally large wage earning capacity. Each of these industries is susceptible of study in minute detail. The actual labor is largely performed by machinery which has been subjected to the long and intense development by the ablest of minds.

These industries employ more than half the workmen and women of the country, comparatively few of whom can hope for promotion within the industries. Nevertheless, the records show that the leaders have been selected, or have pushed them-

selves forward, from the ranks, and the same process is likely to continue. Training for this branch of industry then would seem to be possible along two different lines. One for the rank and file who need only intelligent instruction to do the specific thing which they may have to do, and the other sufficient education in the English language, if the person is a foreigner, to enable him to read and understand instructions in English, and possibly some elementary instructions under the general head of civics calculated to give an intelligent idea of the form of government under which he lives and its relation both to him and his employer.

The other type of industry, where individual parts are made, often using the material partially manufactured in mills of the other type and then assembling them to form a complete machine or other article, requires an altogether different type of employee. In general it is desirable that they have acquaintance with more different processes. For example, a man employed in an automobile factory running an engine lathe should be able to do any work which may be suited to the capacity of his lathe. If he is a milling machine operator he may find work brought to him in such a way and with such fixtures that it has a great sameness, but if he leaves the automobile factory and goes to a shop which makes tools he will find that every job which comes to his machine is different from every other job, and that if he is to succeed he must find a way to do each new job and do it expeditiously.

In other words, while there is simple and elementary work for all classes of mechanics in this type of industry each class has its opportunities for the highest grade of skill and the best of planning and thinking capacity even if the workman is not promoted to be a foreman or to take any other executive position. In a factory of this type it is important that the workman should be taught to analyze the jobs which come to him, to plan out their method of holding them on his machine, to select the proper cutting tools, to make the necessary measurements and make the desired cuts in the proper order to avoid distortion of the work through the release of internal stresses. To be sure, in isolated cases, and as a matter of necessity brought about by the lack of thinking me-

chanics, this work has devolved upon a planning department which is composed of some of the brighter and more capable mechanics who are allotted the task of planning out the work for others to execute, but in general there is almost no limit to the advancement which capable initiative will bring.

The training of such a man must consist of a thorough drill on all typical operations in an actual shop under conditions as to accuracy and finish equal to those demanded in the commercial world. This must be supplemented by training in thinking about the job, both before and after it is done; before the job, because he must learn to plan his work, and after it is done to consider why his instructor's method was better than his if such was the case. It can by no means be predicted that the apprentice's method may not at times be better than the accepted shop method, as he comes to it with a mind free from all traditions which often keep an otherwise capable man from seeing what is obviously an improved method of manufacture.

## CHAPTER XXXIX

### THE TRAINING OF FOREMEN

FOR the past ten or fifteen years we have talked a great deal but done very little toward training workmen. Now, however, there seems to be no doubt but that this form of training is safely launched and that in the course of time it will grow until it will satisfy the demand. We have, however, done very little to improve the foremanship of our factories. To be sure, we advise our young men to attend certain engineering or trade schools, with the hopes that they will come out with a higher grade of technical knowledge of certain vocations than they could get within the shop itself, but this does not of necessity even act to sort out foremen, and the records appear to indicate that if these men stay in the ranks it is only for a short time while they are gathering strength to climb higher. These schools do not add to the number of capable foremen. During the war it was no unusual thing for workmen to make more money than the foreman over them. In fact, it is a question whether the larger number of foremen are much more valuable than a workman who has the initiative and persistence to go ahead with his work and who thus requires but little supervision.

Formerly a foreman was a man who directed the efforts of other men who knew perfectly well what to do, but who would otherwise have kept all the good work for themselves. In other words, the foreman for the most part steered the craft. Then there came a growing tendency to fill up the shop with men of less and less knowledge of the work, and with less intention to earn their income. The foreman then gradually became a disciplinarian and later on an instructor. During all this time foremen were recruited from among the workmen

who showed signs of willingness to work, as well as some capability with the work itself. There was also a tendency to pick out the driving variety, the sort of man who would rule by brute force, but not being allowed to do so tries to scare men into working for fear they may be discharged. During the war these foremen had to change their methods, for men were not at all fearful about losing their jobs, their only fear being that they would not move from one job to another fast enough to take every cent they could from the rising market for their services.

Just what the state of the relation between worker and foremen will be when conditions again become normal no one knows, but it is fairly safe to assume that it will be many years before the fear of a foreman is going to be a strong factor in industrial relations. It is of course much better to appeal to the self-interest of the worker, and the successful foreman is likely to be the man who helps his subordinates most effectively to produce more and thereby earn more. If foremen can only be educated along these lines, we may find the whole industrial problem much nearer of solution than ever before. To-day, however, foremanship is still of the pre-war type which smacks of autocracy rather than democracy.

A large part of the working forces of this country have but recently come from other lands and their most intimate contact with this country is through the foreman under whom they are placed. Their Americanization may depend in a great measure on him. Can we therefore afford to select our foreman without taking into account the fact that to the worker he represents America? These men have come from countries in which a man is a carpenter because his father was a carpenter and his grandfather was a carpenter. Here, however, he finds an entirely new attitude. He finds the spirit of adventure, and in his efforts to better himself, he sees no harm in saying that he has worked five years at a trade when as a matter of fact it was five weeks. The consequence is that from this part of our population our system of public trade schools cannot provide, for some years at least, any adequate supply of help, even to the most common trades. In the meantime the largest function of our foremen will be

that of training these men and women. They will have to do their work intelligently and keep order by sane and rational methods. The foreman of to-morrow must have a keen realization of his men's trend of thought. He must know that he cannot expect that the same method will get the same work from a Finn as from a Greek. He must be a builder of men, and he must be able to both see and cultivate the good qualities in a man.

His first job with a new man is to find out what that man knows, not what some one has taught him to say, but what he really knows. It is not enough to set him at work at some machine to see what he can do, for he may spoil the machine and injure himself. Indirect questions help, for if the man claims to be a planer hand, and does not even know what makes he has run, it is unlikely that he has had a very long or intimate acquaintance with them. In a way this is also a function of the employment department, but that department has to deal only in a general way with the fitness of the candidate for a job, while the foreman has the problem of making as good a workman out of him as his limitations will allow. He may play safe by putting him on some simple job, and letting him work up gradually, but the nearer he comes to correctly sizing up the man's ability at the start, the less expensive will be his probationary period.

A characteristic which all foremen might well possess is that of patience, but unfortunately most foremen do not have patience enough with the men who have not been brought up as they have. There are many capable mechanics who are slow to learn, and they have only learned by being kicked and cuffed around from shop to shop. It would have cost the community no more to have had one shop carry them the entire time, in fact, it would probably have cost less, but as it is each shop has contributed part of their education and none, until they had their trade well in hand, received any return. Any foreman can undoubtedly recall many instances of men who made a bad start in life and who have since done well; possibly some of them have outstripped him.

If a new man fails in the first task that is set before him, it may be that his instructions were insufficient, for if one

man does not understand another there is always the chance that the one who gave the instructions is not clear in his own mind as to exactly what he desires done. Probably every shop has at least one foreman who really does not know how to do many of the tasks which he daily directs. He has always had the good fortune to find men who could do the work. When the time comes, however, that he cannot find a man ready trained for a particular job, and he has to break in a man, there is serious danger that he will at least get out of patience with several men who might have made excellent men for the job, if he had frankly admitted that he himself did not know how to do it. Again, if a man does not understand instructions he may not be deaf, he may merely be unacquainted with the English language as misused in our shops and he will certainly not understand any better if the instructions are yelled. On the other hand, he may understand if the foreman is patient and repeats his directions slowly and distinctly. Timidity is often mistaken for ignorance. A timid man may make a most excellent workman. To be sure it would be easier in some ways if all men were not at all timid, or else all were equally so. To some men ordinary courtesy seems like timidity, and they will often turn down men who since have gone through experiences which would take the heart out of those same blustering foremen. These timid men once acquainted with the shop make excellent workmen. They are not so likely to stir up trouble, for they lack initiative.

Timidity is likewise often attributed to men who merely are assuming what they consider their place in life. When foreigners first come to this country they are apt to assume the same attitude toward better dressed people that they formerly showed toward their "superiors," but after they have been here a little while they are apt to let the natives take the narrow side of the walk. It would be better for them if they had been taken in hand by the right kind of a foreman and part of their natural timidity preserved, at least enough so that they would be content with the part of the walk which is theirs. It is difficult to estimate how much of the Bolshevism which now exists in this country is due to lack of ap-



preciation by foremen of their proper part in Americanization.

It is also difficult for a man who knows how to do a certain task, and who has acquired that knowledge through long practice, to recall the difficulties through which he himself passed, and to realize that others with even less aptitude for the work can be taught to do it too. We are all apt to overlook some minor but very essential point in our directions to others. If we visit a strange city and inquire the way, and are told to go down a certain street, take the second turn to the left, then the first turn to the right as far as the red building, and then turn to the left, we are apt to get directions mixed after the second turn and have to inquire again. A man who has never run a lathe is in about the same state of mind. If he is shown the shipper rod, the feed reverse, the longitudinal and cross feed, the tail stock and hand wheel, the compound rest, where to oil the machine, and his job all at the same time, it is a safe bet that he will forget something. In fact he may not get further than the shipper rod. The safe rule is to show only one thing at a time. In the case mentioned, the man should have been brought to a lathe which was already oiled, the work in place and tool set to the right diameter, so that all he had to do was to push over the shipper rod, and pull it back when the tool reached a chalk mark. If he is thus shown one thing, and allowed to do it even once, he is very much more likely to do it that same way the next time than if he is given a confusing mass of instructions.

Then again, some foremen use their own nomenclature, and if the man comes from another section of the country and is used to another name he is no more of a fool than the foreman himself. In fact, the foreman ought to admit that his fondness for localized nomenclature is foolish and provincial, and he should try to accustom himself to the words used in all parts of the country. In any event he certainly has no right to criticize a subordinate who brings in a word which is new to him; it is his business to know the whole category. It is also part of his job to make what impression he can on the world-wide problem of a universal nomenclature. There are certain names which are more widely used than others, and if every one tries to find out what these names are and intro-

duce them gradually in the shop there may ultimately be brought about the adoption of a single name. If the business is one which is peculiar unto itself there may be occasion for the publication of a dictionary, or word book, of the industry. Such books are now in use in some industries and they are very helpful, though it must be admitted that they are used more by the stenographers in the office than by the shop force. With the coming of women into industry the foreman should remember that many of the names used in the shop have a different meaning in the minds of women. Some very simple words like "dog" and "apron" at first remind women of something quite different than that which it is intended the words shall convey. It is just as necessary that these words shall be explained in their new significance as it is that words which have different significances in different shops should be explained.

Another matter which foremen should be particular about is the care of tools and machinery. It is second nature for men who were in the shops fifteen or twenty years ago to take good care of their tools, for then it was considered a part of each man's training, and many men owned most of the tools which they needed. Now it seems to be left to the foremen to see that tools are provided; tools which only a few years ago were brought in by men who would have been ashamed to call themselves mechanics if they could not present a suitable kit. Nevertheless it is necessary for production that the proper tools shall be at hand, and a shop full of men running to each other and borrowing personal possessions is only worse than a shop in which the supply furnished by the firm is inadequate. It is, or it should be, part of the foreman's job to see that enough tools are at hand so that every man can do the most effective work. It may be that he can secure these tools by going to the superintendent and getting them placed in the tool room, or perhaps he can best get them by shaming the men into buying them for themselves. Then again, it may be that when the employment department hires the man, the desirability of possessing a suitable set of tools is impressed upon him. Unfortunately there seems to be a great uncertainty as to the tools which a workman should

have. During the war this was compromised in many places by not expecting anything, and stocking the tool room as liberally as possible. It seems as though a foreman whose men own their own small tools would always find them more stable, dependable, and reliable than the foreman whose workmen were always running to the tool crib or borrowing from each other. Pride in property is a strong influence toward stability. The man who might give up his job and rush into some other line of work that offered a slight increase in pay is not so apt to do it if he has \$50 invested in small tools that will be of no use in the next shop. The possession of the tools seems to bind him to his trade.

Another matter in which foremen should be instructed is that of sharpening and properly arranging tools for rapid production. At the present time most men have never been apprentices and they have never stayed on a job long enough to make their foreman anxious to help them to any great extent, but if their present foreman will only take the pains to demonstrate to them how much can be gained if they will sharpen their tools while something else is going on, and keep them arranged, then a connection will have been established that will make the labor turnover much less.

Foremen should also be made to realize that with the present rapid flow of labor through the shops it is also part of their duty to retain as many as possible of those who are really fitted to do the work, not through favoritism, but by making it as easy as possible for them to progress. Some may resent being given too easy jobs, but the great majority rather appreciate having an easy time until they get used to their surroundings and acquainted with the ways of the shops. This was especially true in munitions shops where many men were anxious to get ahead so that they might earn more money, or else they were patriotic and wanted to boost production, but so many of them came into the work with so faint a notion of what it was all about that they were very glad of the time that was given them to get used to their new surroundings. An easy job to a man who comes into a new industry is one which requires the learning of the fewest things. For example, a man who has been accustomed to

turning straight work, and is therefore familiar with the motions necessary to throw the shipper rod over and to set the tool for depth, is ready to learn to cut vee threads without much exertion and delay. On the other hand, if he were put on a job of faceplate chucking he might find the change too great and so he would not work with the same confidence.

The same reasoning applies to practically every other tool and operation in machine shops and elsewhere. New press men should have a chance to get accustomed to the noise of operation and to the recurring motion of the machine before starting in responsible charge of a machine, no matter how sure of themselves they may be. It may save fingers, if nothing more, and it will give the learner a sense of the need of care on his own part. Sometimes, of course, it is possible to hire men who come fully prepared to take hold at full speed, but even then it is better to make them understand that they will have to come on as helpers until their regular jobs will be ready for them. This is especially true when taking on female operators. Most of them are quite unfamiliar with rapidly moving and noisy machinery. It is better, if possible, to fence off a few machines and have the beginners do the first part of their work away from the curious glances of the others and especially of the male operators. After they once get accustomed to their work so that they do it with a degree of confidence, even if not automatically, they can be moved out in the shop or the fence can be torn down. Of course, there is a type of girl which will much prefer an admiring gallery even when she is making mistakes, but they appear prominent, not by their numbers, but by their persistence in being seen.

When a foreman is giving instructions, if he stops to ridicule some other way of doing the job, or to explain how it was done in so-and-so's shop twenty-five years ago, the wrong way is likely to make more of an impression than the right way. Instruction should be put on a single track and should not run into discussion, until the operator is sufficiently well trained. In other words, if there are several ways to do a job which are used under different conditions, teach one thoroughly before mentioning that there are others. This should

not be taken to mean that methods should not be illustrated. It often helps a man to tell him some story or anecdote that will always remind him of the fact that one is presenting. Instructions may be given in detail and yet be concise. Completeness is the most important. A detail omitted may alter the entire conception of the worker, and yet that detail may seem entirely obvious to the foreman. Conciseness, however, is almost assured if the instruction is divided as at first suggested into units, and this analysis of the work is a large part of the successful foreman's job but one to which many pay little attention.

Motion study should also be taught to foremen. By this is meant motion study literally, not any one man's idea of motion study. A great deal of time is lost by awkwardness, which may be smoothed out, but which is not necessarily always inefficient. There are always men who cannot do anything except in an awkward way but they should not be debarred from working just on that account. Mr. Gilbreth has said that each worker does his work in one of three ways, one when he is just working, another when he is being watched, and the third when he is showing some one else. From this it is evident that if we want to know how a man does a job we must see him without his knowing that he is being watched. Some foremen appear to know everything that is going on without looking. They probably have quick perceptions and do not have to stare at a man to grasp the fact that he is sitting down and doing nothing. Great care should be taken in correcting any one's methods to be sure that it is actually an inefficient method that is being pursued, for the method which one is tempted to criticize may be just the one that might better be adopted.

Another duty of the foreman should be to see that his men are fully instructed in the dangers of the work in which they are engaged. These dangers may be: (1) occupational, (2) accidental, (3) due to ignorance, (4) due to carelessness.

Occupational dangers are those which are inherent and peculiar to a given job. They can be eliminated or, at least, minimized by mechanical safeguards. Sometimes the mechanical guard cuts down production and is, therefore, con-

demned by both superintendent and worker, but whether guards are furnished or not, or whether they are adequate or not, the duty of the foreman remains clear. He should warn and show the operator just what dangers are present. A mechanical guard which is broken or accidentally removed is much worse than no guard at all, as it gives the worker a sense of security and makes him depend on the guard and not on himself. It is usually unnecessary and unwise to mix instruction as to dangers with instruction about work. The first few days of employment show few accidents in most plants. It is only when "familiarity breeds contempt" that danger really comes. It is usually best, therefore, to wait until the new employee is fairly into the swing of the work before pointing out its dangers. This applies to the foreman's work and should not be construed into permitting the employment department to gloss over or ignore dangers inherent in the work offered candidates.

A true accident is something which cannot be foreseen. For example, a man who has for months been lifting heavy boxes into trucks without strain, may some day slip and strain his back. Such an accident may cause him much suffering and loss of time, but it could not be foreseen. Accidents like this make up about 10 per cent of all accidents in a well-guarded shop, and will make up a larger and larger percentage as other unnecessary accidents are cut down.

Accidents due to ignorance and carelessness constitute by far the greater part of all accidents. They cannot always be separated, as many cases caused by carelessness are laid by the help to ignorance. Ignorance is the great plea and alibi of the foreigner and only the most persistent and unrelenting watch by the foremen will reduce these accidents. It is not natural for the pushing, aggressive, energetic worker that we like to have in our shops to be careful. The fact that men are careless only adds to the responsibilities of the foreman. There is no one else to take his place as a big brother to the men under him. They can be appealed to on the score of the loss to their families, for no compensation laws offer anything like adequate recompense for time lost, to say nothing of mental and physical anguish.

## CHAPTER XL

### AMERICANIZATION

**W**HILE there seems to be an entire unanimity of opinion as to the need of a concerted and country-wide Americanization of our foreign-born element, there is nevertheless a most complete divergence of opinion as to what constitutes Americanization. Efforts along this line thus far seem to point in two directions, first teaching the foreign born to speak English, and second, getting them to take out naturalization papers. However, an American is something more than a man who can read and write and exercise the power to vote at convenience. He is a man who believes in the constitution of the United States, and who can and will defend that constitution by word and act whenever it is called in question. He is a man who believes that every one should be willing to make sacrifices for the common good, and make them in such a spirit that they are not real sacrifices at all. Teaching English is one step and only one, and taking out naturalization papers is but another. Americanization, however, is not wholly an act of the immigrant. It must be shared by those of us whose families have been here for generations. We have invited these people to come to us. We have been too busy to pick out our guests, so we have sent out wholesale invitations. We are sorry that some have misunderstood us, but we must abide by what we have done and do the best we can to have the ideals of all the people who live here such that a true American can subscribe to them.

Americanization cannot be accomplished by absent treatment. A class of Italians can be taught English by one of their own number who has been here long enough to become an American citizen, but they will not be as thoroughly Amer-

icanized by the process, as they would have been if the teacher was one whose family has been here for generations and who thus unconsciously represents to them ideals which perhaps cannot be described, but which can be transferred by inspiration rather than by injection. Our error lies mostly in just this, we expect our new-come guests to learn their way about the house and to learn and adopt our ways of living and methods of thought without personal contact with us. The natural result is that they learn very soon that we did not really intend to invite them and that we are sorry they came. Consequently through fear they have associated themselves together prepared to defend themselves against what proves to be imaginary interference. This condition must of necessity grow worse instead of better, until we are willing to hold out a helping hand, not a hand full of money but the hand of welcome and of acquaintance. The word brotherhood has been so many times used to indicate something so akin to paternalism that it is a dangerous term to use, but if we could think of a big brother who is not too ready to raise his hand in their defense, but who helps them to help themselves, then that is the sort of big brother that we should all be to our friends who are not yet fully Americanized.

It is very common to find a man with a strange name coming forward very rapidly through our shops or commercial establishments. We wonder how he does it, especially if he begins on the lowest round of the ladder. Later it develops that he was a graduate of some college or engineering school in his own land, and that his early months here were passed in obscurity while he was acquiring a working knowledge of English. Men of this type feel the lack of cordiality more than those in more humble walks of life at home, but they do find themselves accepted sooner or later, while the digger of ditches is left to himself to take up with all the unfortunate theories which are offered by victims of social unrest. Small wonder if they come to believe that all Americans are too "high-brow" to condescend to meet them halfway. Unless we are ready to get acquainted with them we must expect that the Bolshevik ideas will carry them away. It is very much like the effect of the saloon which has competed



with the churches on very much the same basis that Bolshevism has competed with American ideals. When a man is thousands of miles from home he is ready to make friends with the first man who will fraternize with him. If this first man has un-American beliefs to present we have no right to find fault with any one but ourselves.

What then is the cure? Not merely more English, though that is necessary, for it is useless to offer instruction in English and stop because no one comes. It is necessary to make the instruction and the surroundings such that the type of men whom we want will want to come. This does not mean that wealthy people should open their parlors and pour tea for the class. It means that a room with comfortable chairs, tables instead of desks and with the "No Smoking" signs carefully removed, should be provided. It means that the teaching must be done by a man who can command the respect of his class, not by his erudition, but by his being a man's man. He does not need to lick his students but he should be able to do it and he should look the part. He should rank high enough in the community so that his pupils know that he is a part of the American nation and that they are not being taught merely by the hired man. The atmosphere of the entire place should be one of business-like welcome and good feeling. It should be easier and more comfortable for men to go to school than to stay at home.

But after the night-school work that is possible there is much left to do to make the surroundings truly American. In all the larger cities there are sections where the only thing American is the fact that the architecture is of the Civil War era. The people are all of one race and they carry with them the customs and habits, to say nothing of the language of their former homes. They do not need to do anything different because their whole life can be lived in that quarter; they can buy everything that they need and secure all the amusement they can comprehend and afford without doing more than take an occasional day at the park or beach. They have their own paper in their own language and stores where the signs and everything else are plainly imported. In smaller cities these distinctions are not so evident but there is still the coun-

ter effect. It is the line of least resistance for men and women to come here and to live in the old way and not to become any part of the Nation. All this can be cured in time, if we can first of all do away with the foreign language newspaper and then with the foreign stores and markets. In other words, if we make it inconvenient for a man to stick to the ways of his nationality and make it easy for him to become an American he will do it; otherwise he will not.

Our greatest forces for Americanization so far seem to be baseball, plus the more recent effect of the war. People who at home would take no interest in baseball soon grow to be regular attendants here, and the democratizing effect of the bleachers is not to be belittled. Here men are just men, a home run brings the same feelings to the sympathizers with each team and everybody is so partisan over the game that rank, money, station, and nationality go in the discard.

Much has been said about a spiritual awakening among those in the fighting. It is a spiritual awakening in the sense that they have a new basis for valuation for themselves and others, but not very markedly in the sense of a change of religious spirit. However, unless something is done to keep this same relation awake, and to avoid going back to the conventional way of thought, much of this new point of view will inevitably be lost. So long as the foreigner finds it easier to remain a foreigner he will do so. It must be made the line of least resistance for him to do otherwise, and that must be accomplished by men who have been for generations in this country, if we are going to preserve the sturdy and self-reliant qualities which make true Americanism. Those among us who most easily follow traditional ideals must give our time as we can make a way to spare it to getting acquainted with our foreign brothers. The bootblack, elevator man, fruit vendor, all that we come in contact with, will be better Americans for contact with Americans who will treat them as fellow beings rather than as a useful part of our economic world, alone. This does not mean preaching sermons. That is the worst thing that can be done, but it is possible to talk a very mild brand of politics to them, and to get their point of view. If it does not agree with ours it is certainly just as American

for us to argue it out with him as with some one who simple differs with us over party fences, and much more profitable.

But after all Americanization is a personal individual affair and nothing that can be done wholesale and by deputy. We will Americanize our friends just when we discover that they are of the same clay that we are, and just when we want to do it, and no sooner. All the classes in English, all the speech-making can amount to almost nothing alongside the personal effort we can all give to make it the easiest thing for them to become good Americans rather than retain their foreign customs and ways.



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